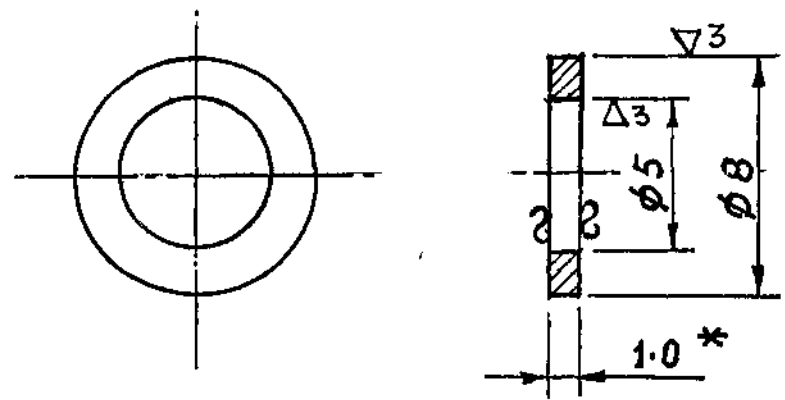


DRAWING NUMBER
3402A-1-5-8Kd.



NOTE:-

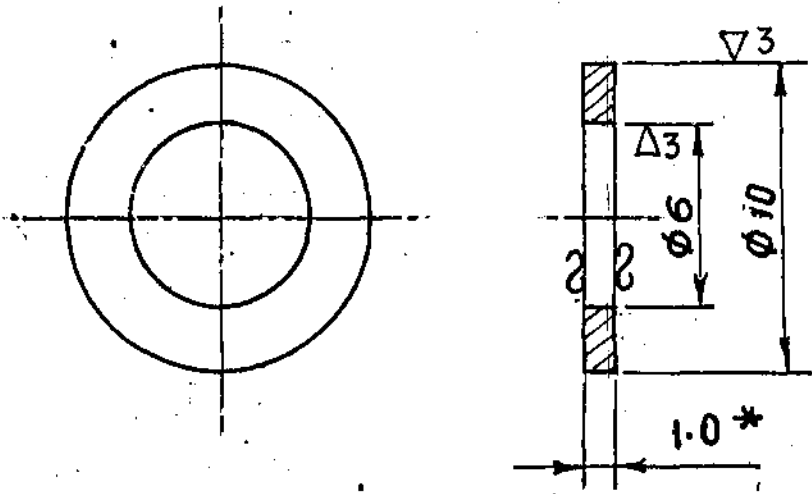
1. COATING :- OXIDIZING.
- 2 * TOLERANCE ON DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL.

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT.	TO BE STAMPED OR MARKED WHERE INDICATED THUS ≠ (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
		MATERIAL:- STEEL GDE.10 TO GOST 1050-74 .	USED ON: GENERATOR, UTD-20 002-145H	
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI		
DRN <i>[Signature]</i>	SCALE:- 4:1	TITLE WASHER		
CHD <i>[Signature]</i>	DIMENSIONS IN mm			
TCD <i>[Signature]</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69	D S CAT NUMBER		
APPD <i>[Signature]</i>	ALL THREADS CONFORM TO			
DATE 26-11-98		DRAWING NUMBER 3402A-1-5-8Kd		

9
135


DRAWING NUMBER
3402A-1-6-10Kd



NOTE:-

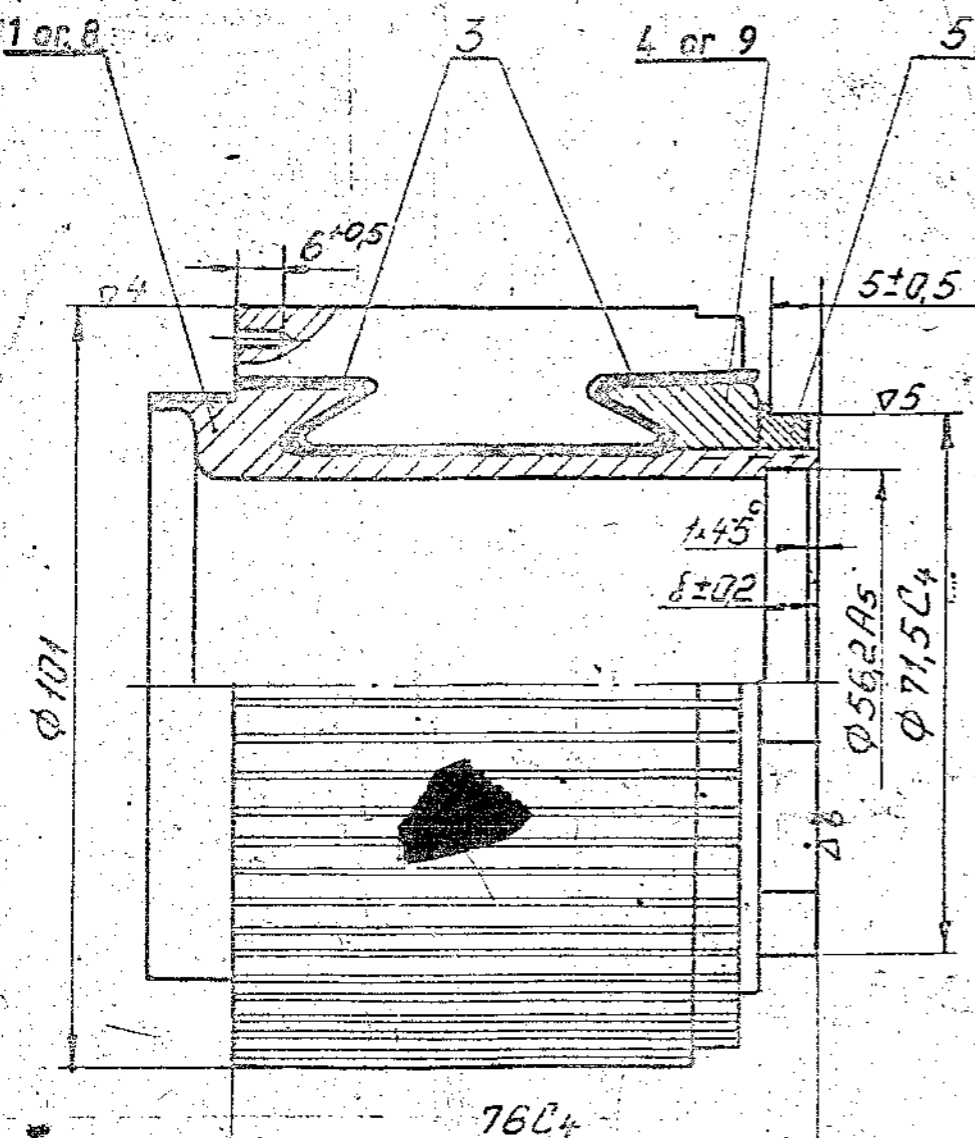
1. COATING: OXIDIZING.
2. * TOLERANCE ON THE DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL.

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

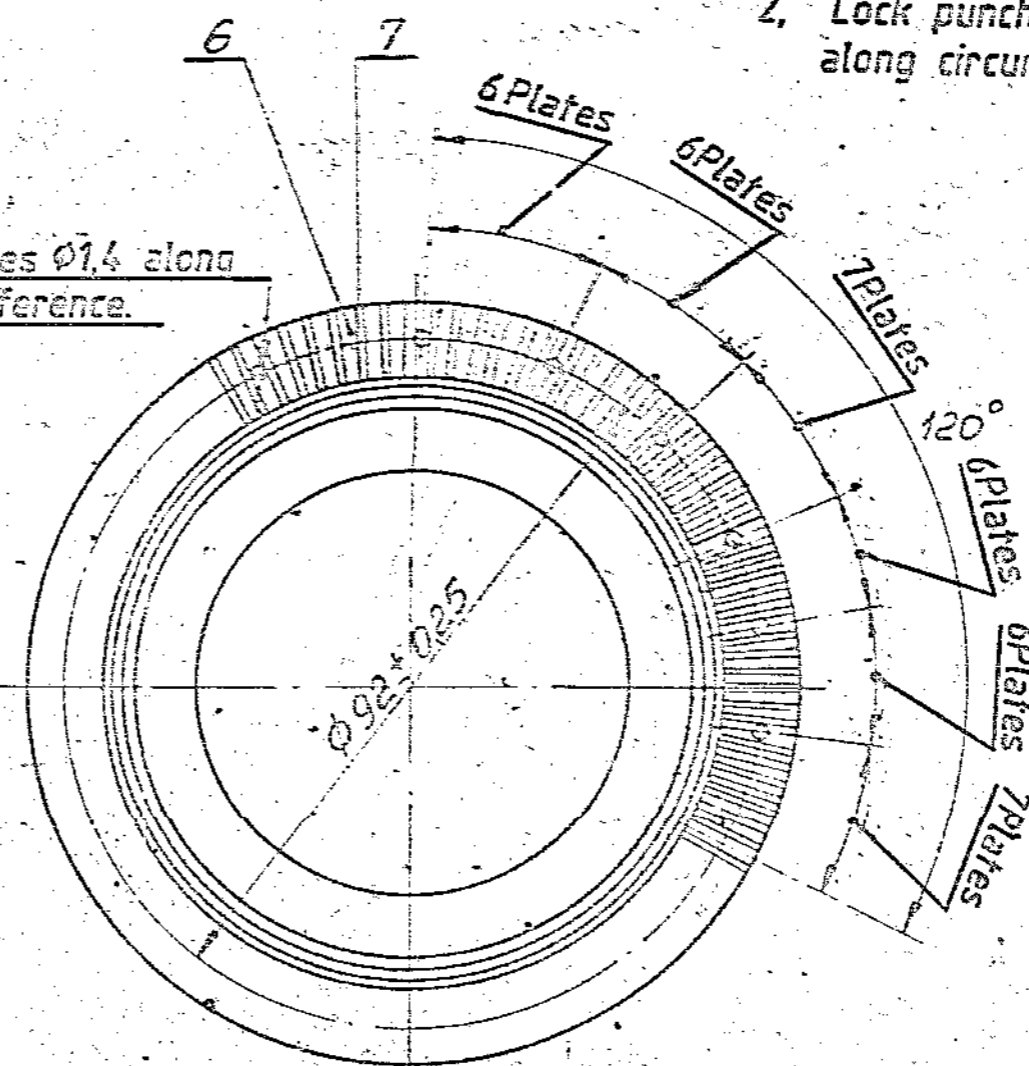
		EST. WT.	TO BE STAMPED OR MARKED WHERE INDICATED THUS \neq (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
		MATERIAL:- STEEL GDE. 10 TO GOST 1050-74	USED ON GENERATOR. UTD-20 002-145 H
ISSUE	DATE	NATURE OF AMENDMENTS	
DRNG	<i>[Signature]</i>	SCALE:- 4:1	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.
CHD	<i>[Signature]</i>	DIMENSIONS IN mm	
TCD	<i>[Signature]</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69	 TITLE WASHER
APPD	<i>[Signature]</i>	ALL THREADS CONFORM TO	
DATE 26-11-98		D S CAT NUMBER	DRAWING NUMBER 3402A-1-6-10Kd

9
138

HL60 029



18 Holes $\phi 1.4$ along circumference.



1. Check commutator for racing in hot condition as per TM 12-153 at 13000 r/mm.
2. Lock punch the nut over thread at six points along circumference.

X141
15

Designation of alternate	Code of article	A	B	Г	Д	Е
520.0.97 H	BF-7500	522.064H	219.024H	218.203H	-	-
-01	BF-7500 A BF-7500 B 2 Series				BE6.239.020H	BE6.485.016H

S.No	Designation	Description	Qty.	Remarks
6	523.171 H	Commutator bar	114	
5	471.137 H-11	Round nut	1	
4	Г	Vee Ring	1	See Table
3	B	Insulation taper	2	See Table
1	A	Commutator bush	1	See Table

9	E	Vee Ring	1	See Table
8	Д	Commutator bush	1	See Table
7	520.097 H-1	Mica C/T M -1 TY 21-25-25-74	114	Without drawing

PILOT SAMPLE SHOULD BE APPROVED BY AHS/P BEFORE BULK PRODUCTION

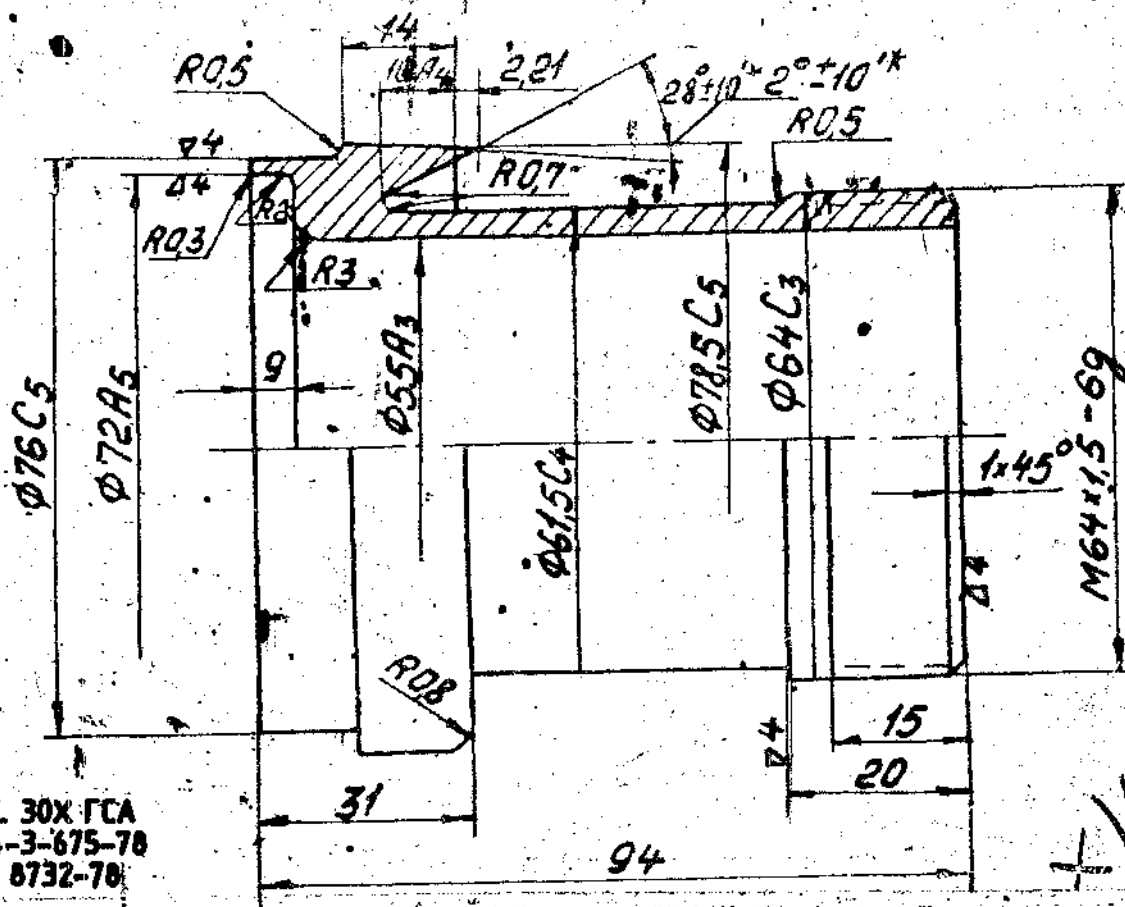
EST. MASS	2.54 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS WAY (LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. ROUNDED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE		
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL: USED ON: 505 117 H
DRN	SCALE: 1:1	CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI
CHKD	DIMENSIONS IN mm	TITLE: COMMUTATOR
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER
APPD	ALL THREADS CONFORM TO	DRAWING NUMBER: 520 097 H
DATE: 9-9-87		

30

522 063H

6-Unless otherwise specified.

1. Tolerances for free dimensions are as per 22 AT 52.
2. Skewness of thread measured for the ring end of $\phi 75$ mm with respect to hole $\phi 55$ A3 should not exceed 0.08 mm.
3. Make circular notches to depth 0.2 mm with pitch 0.5 mm on surface of $\phi 76$ mm.
4. Carry -out heat treatment. HRC 34 to 38.
5. Instead of circular notches, grid - type knurling 1.0 GOST 21474-75 is allowed.
6. Dimensions are given for tool.



STEEL 30X ГС
 TY 14-3-675-70
 GOST 8732-70

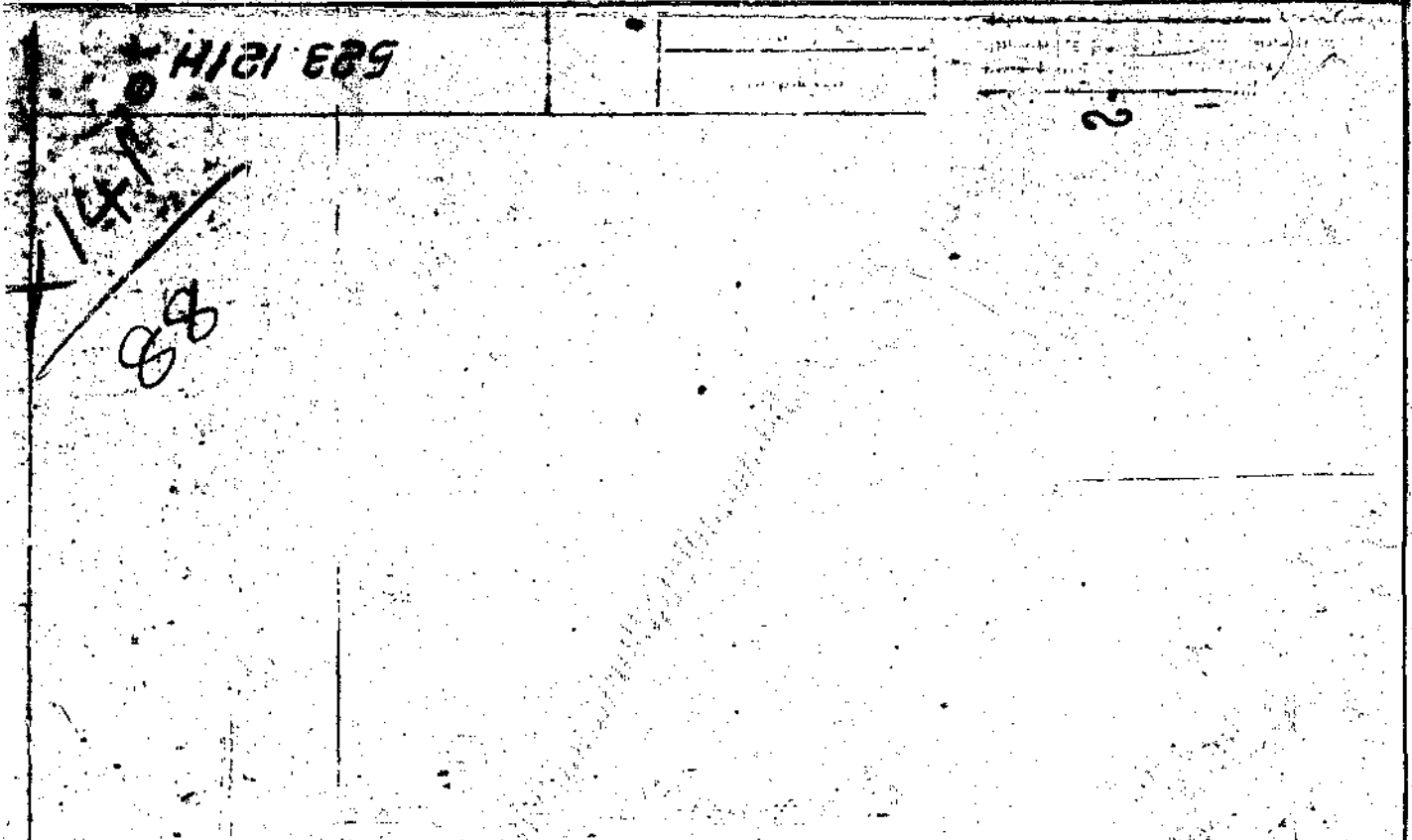
PILOT SAMPLE SUPPLIED BY AVADI BELLER WORK PRODUCTION

ISSUE		DATE	NATURE OF AMENDMENTS	ST. MASS 0,53 Kg	TO BE STAMPED OR MARKED WIRE INDICATED THUS ϕ
ORD		CPA	SCALE: 1:1	LETTERS	
CND		3/8	DIMENSIONS IN mm	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED FACED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT DIMENSIONS ARE PERMISSIBLE	
TCD		2/8	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	MATERIAL: ** SEE ABOVE	USED ON: 522 064 H
APPD		2/8	ALL THREADS TO CONFORM TO	CONTROLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
DATE		9-9-87		TITLE: COMMUTATOR BUSH	
				D S CAT NUMBER	DRAWING NUMBER 522-063H

544 NOTAS NO. 1011120
 23.01.87, ДОСЕТМОУНО ВЛЕЧНЫМ ПЛОТНИМЕР N-1
 Исправл. drawn
 Справочн. №

D83

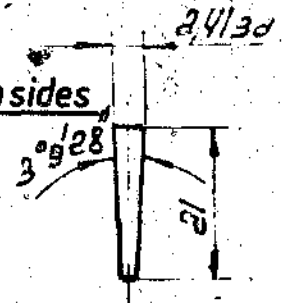
99



Impression of cut 1x1 is to be to depth 0.08 to 0.1mm from both sides

On two sides

69CE



Исполнение, дата
 Изм. №, дата
 М.П.

** PROFILE ДТРПТ 23°9'28" HA6p K6 1 GOST 4134-75

PILOT SAMPLE SHOULD BE APPROVED BY ...

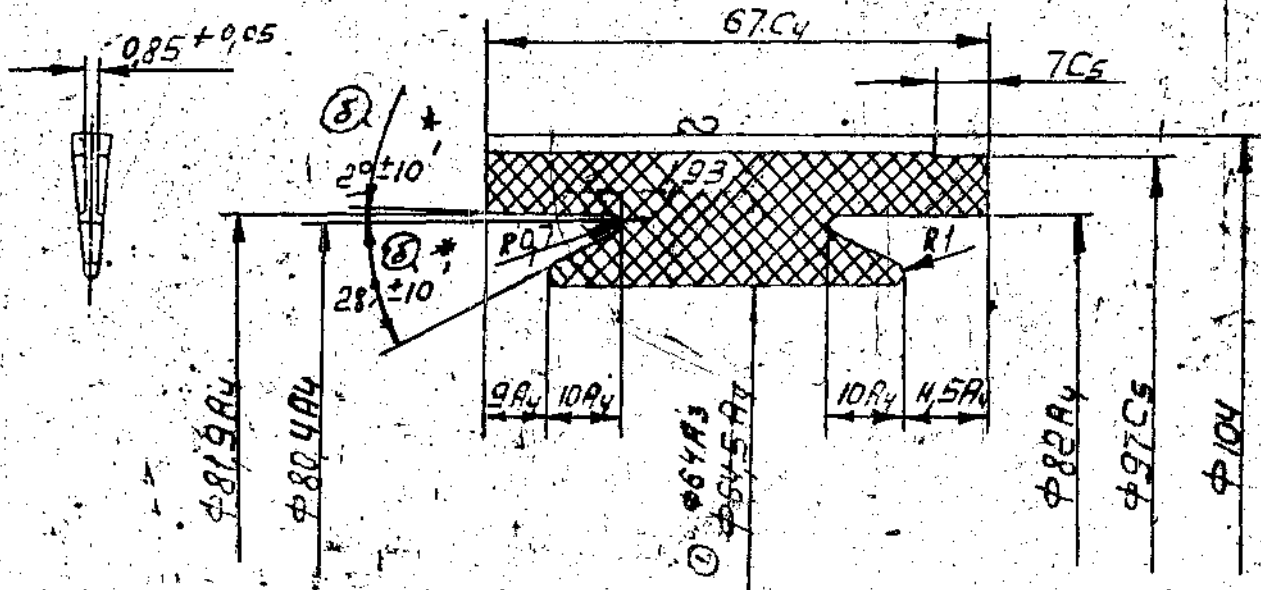
100a

ISSUE	DATE	NATURE OF AMENDMENTS	WEIGHT 0,021 Kg	TO BE USED WHERE MARKED (LETTERS)
DRM	CPA	SCALE: 1:1	MATERIAL: ** SEE ABOVE	USED ON: -
CD		DIMENSIONS IN mm	CONTROL RATE OF REPECTION (HEAVY VEHICLES) AVAILABLE	
TCO		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	PROFILE OF COMMUTATOR COPPER (BLANK)	
APPD		ALL THREADS TO CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE				523-121H

② H7/H8 g5

▽ 6 UNLESS OTHERWISE SPECIFIED

- *DIMENSIONS ARE GIVEN FOR TOOL.
- PROVIDE DIMENSIONS WITHOUT DEVIATIONS AS PER ACCURACY CLASS 5.



0-83

100

PILOT SAMPLE SHOULD BE APPROVED BY A.H.S.P. BEFORE BULK PRODUCTION

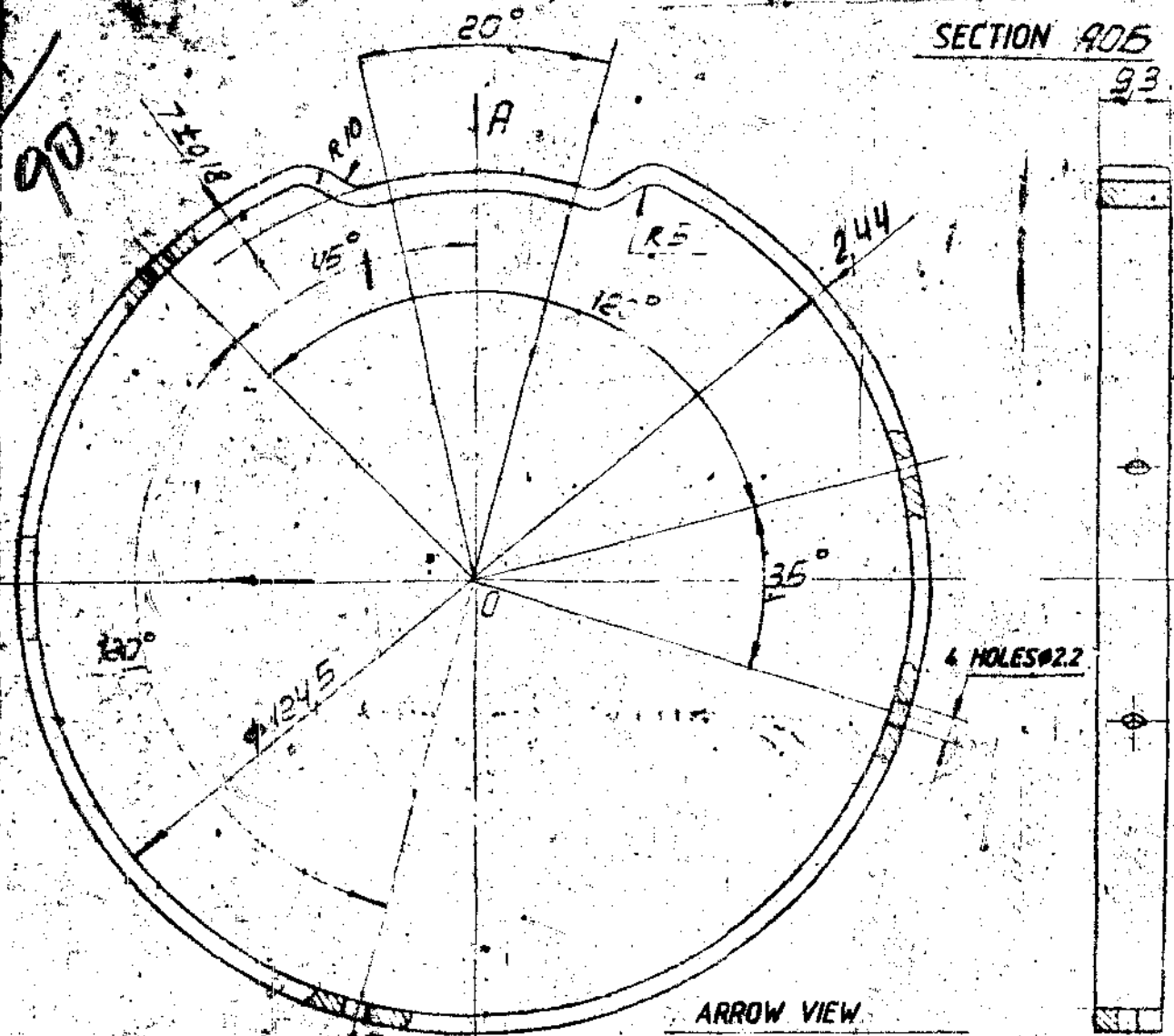
		EST. MASS 0.02 Kg	TO BE STAMPED OR INDICATED THIS BY
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		SCALE:- 1:1	MATERIAL:- BLANK DRG 523 121 H
CHKD		DIMENSIONS IN mm	USED ON:- 520 097 H
TRD		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROL DATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD		ALL THREADS TO CONFORM TO	①
DATE	9-9-87		TITLE: COMMUTATOR BAR
		D/S CAT NUMBER	DRAWING NUMBER
			523 171 H

HOID 165

TOLERANCES FOR FREE DIMENSIONS ARE AS PER ACCURACY CLASS 7, OST 1010.

RING MAY BE MADE OF COPPER M1 WITH THICKNESS 2.5mm.

SECTION 905



BRAZE THOROUGHLY WITH BRASS A 63

OST 019-47
GOST 15527-70

D-83

MM24.4x9.3
GOST 43-70

PROT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST. MASS
0,1 Kg

TO BE STAMPED OR MARKED WHERE INDICATED THIS # LETTERS

101

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

SS JE DATE NATURE OF AMENDMENTS

ORIN SCALE: 1:1

CMD DIMENSIONS IN mm

TCD TOLERANCE ON DRILLS UNLESS OTHERWISE STATED

APPO ALL THREADS CONFORM TO DATE 9-9-87

MATERIAL: * SEE ABOVE USED ON: 805 003 H

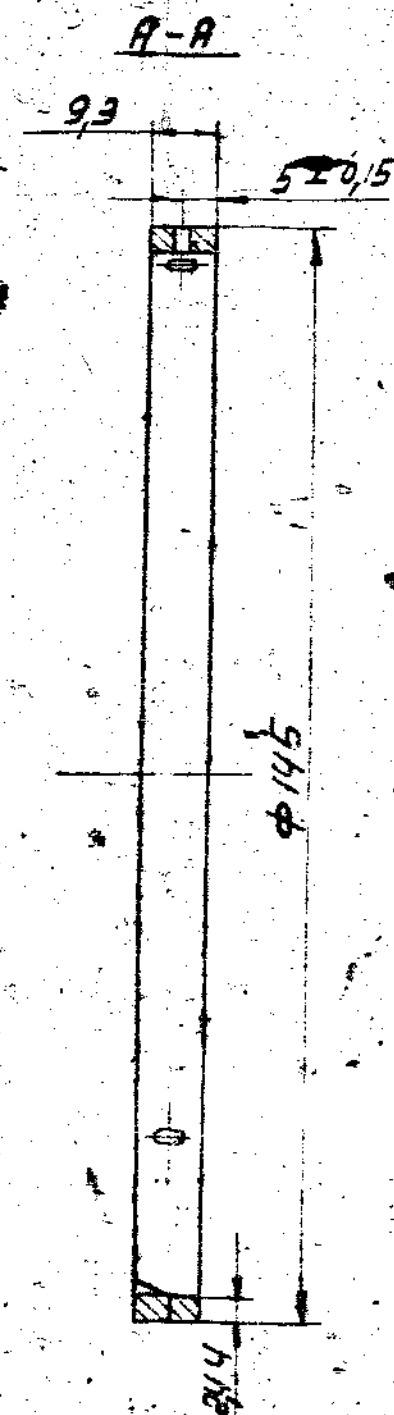
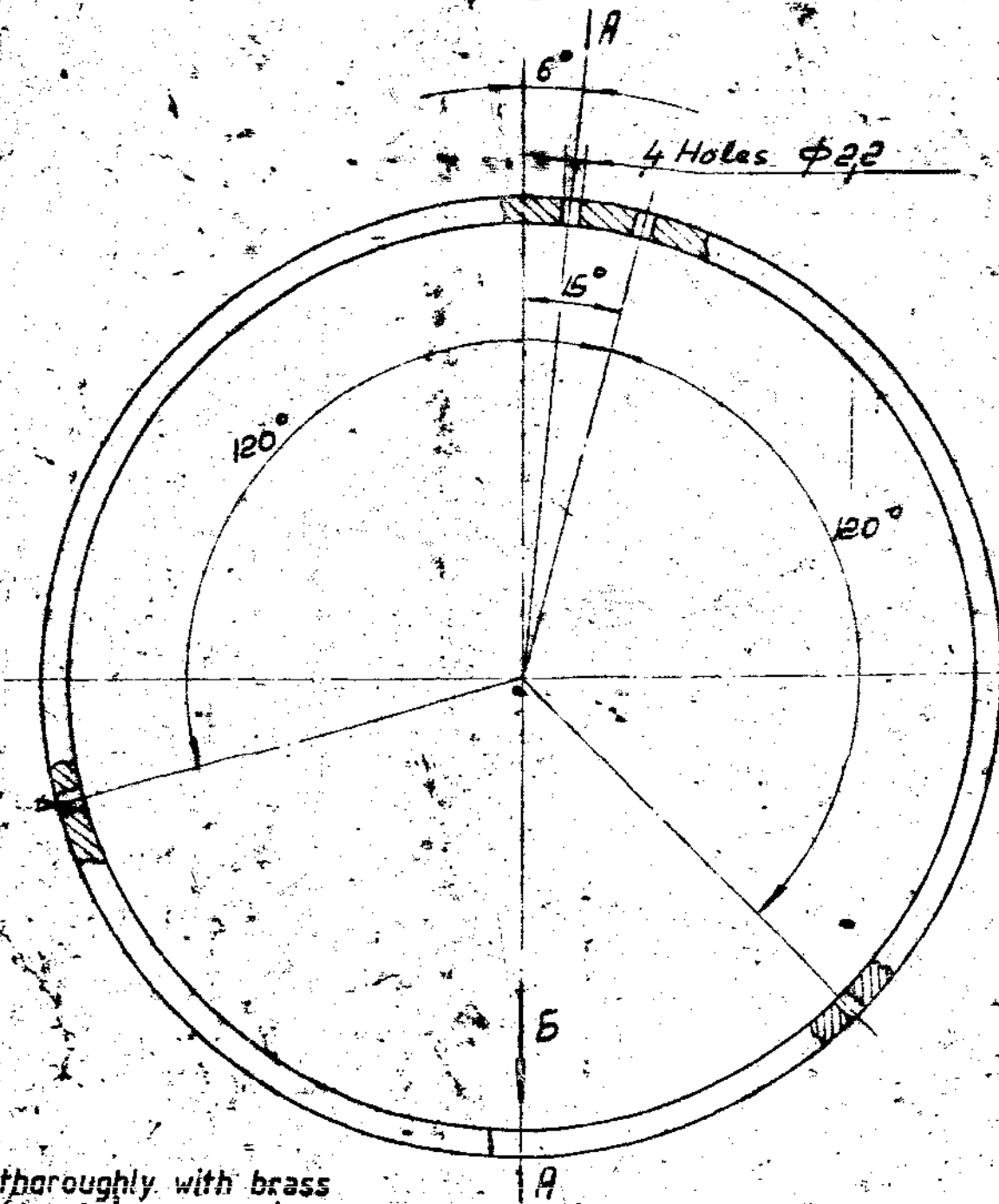
CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI

TITLE: CONTACT RING

D S CAT NUMBER

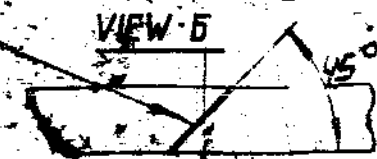
DRAWING NUMBER
531-010 H

531 011 H



1. Tolerances for free dimensions are as per accuracy class 7. OST 1010.
2. Part may be made of copper M1 of thickness 2,5mm.

Brace thoroughly with brass
163-GOST 15527-70

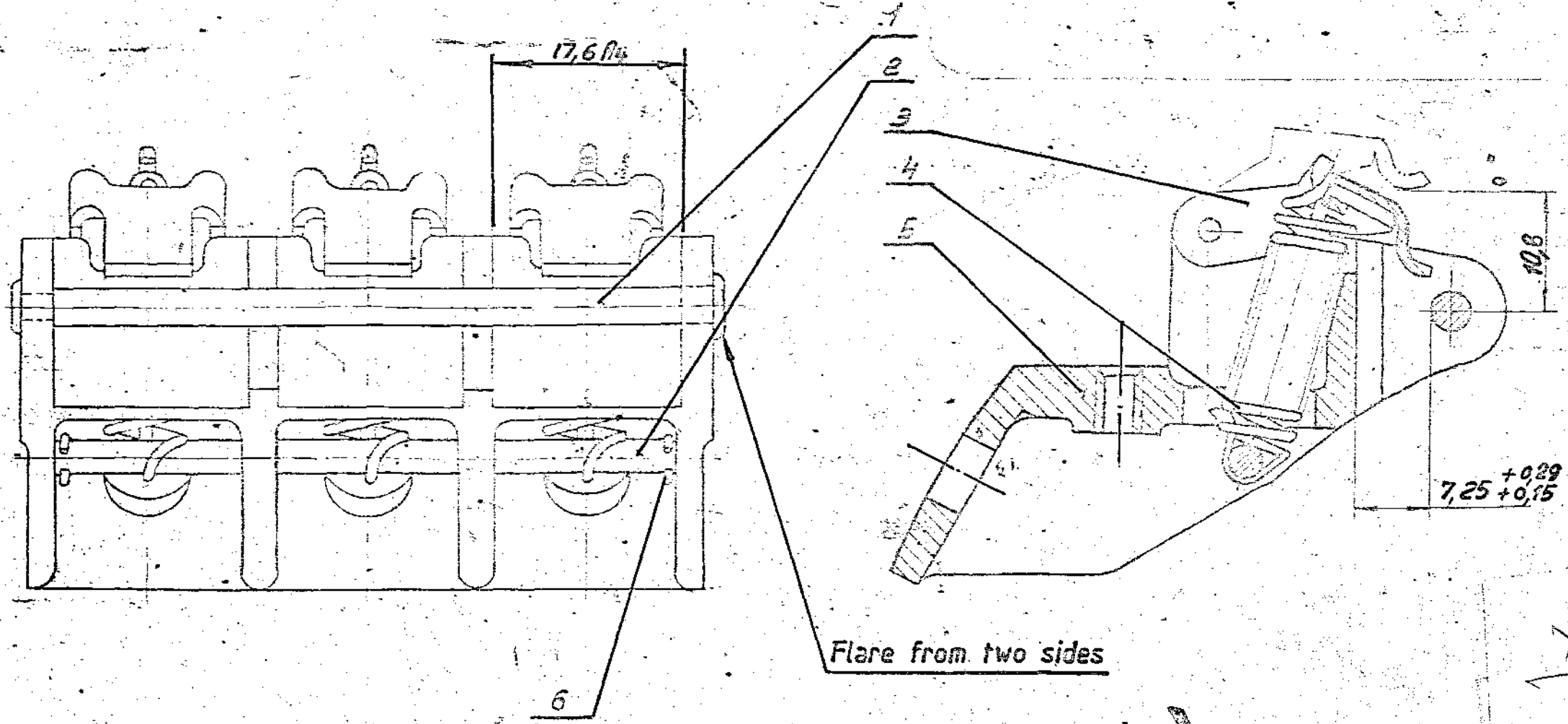


725 040 H
X 141
11M2,44X9,3 GOST 434-78

102

PROT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

EST. MASS 0,105 Kg		TO BE STAMPED OR MARKED WHERE INDICATED THIS BY LETTERS J	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL USED ON
DWM	08/	SCALE: 1:1	725 040 H
CHD	08/	DIMENSIONS IN mm	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADI
TEC	08/	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTACT RING
APPO	08/	ALL THREADS CONFORM TO	D S CAT NUMBER
DATE	9-9-87		DRAWING NUMBER 531-011 H



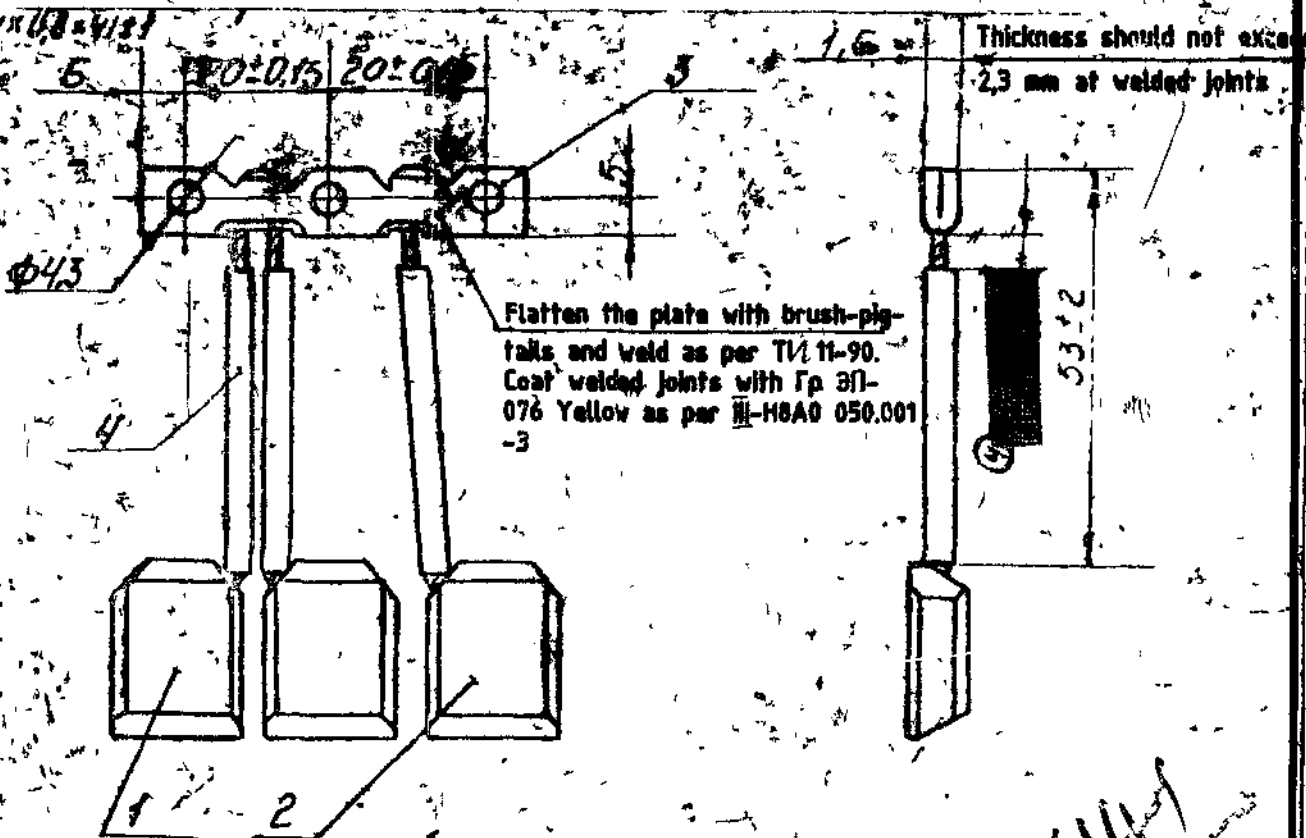
1. Pressure on lever should be 575 to 700 gms for specified dimension 10,8 mm

S.No	DESIGNATION	DESCRIPTION	QTY.	REMARKS
6		Cotter pin 1x6,019 GOST 397-79	2	
5	551.015 H	Brush Holder	1	
4	443.353 H-1	Spring	3	
3	255.026 H	Lever <i>Asfy</i>	3	
2	491.008 H	Pin	1	
1	491.009 H	Pin	1	

PILOT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

EST MASS 0,077Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS (32)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHANGERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS
DRN	SCALE: 2:1
CHD	DIMENSIONS IN mm
YCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
APPD	ALL THREADS CONFORM TO
DATE 9-9-07	
MATERIAL: -	USED ON: 100-256 H
CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TITLE: BRUSH HOLDER ASSY	
D S CAT NUMBER	DRAWING NUMBER 550-044 H

- 555
1. Grinding radius of brushes should be in compliance with remarks in drawings 557,007 H and 557,008 H,
 2. Height of brush after grinding should be at least 24mm,
 3. Part reference no: 4 may be made from rubber tube B4x0,8x41±1 Sp - 129 TY38-10554-76.



AMDT, NOTN, No: 06-1900

83

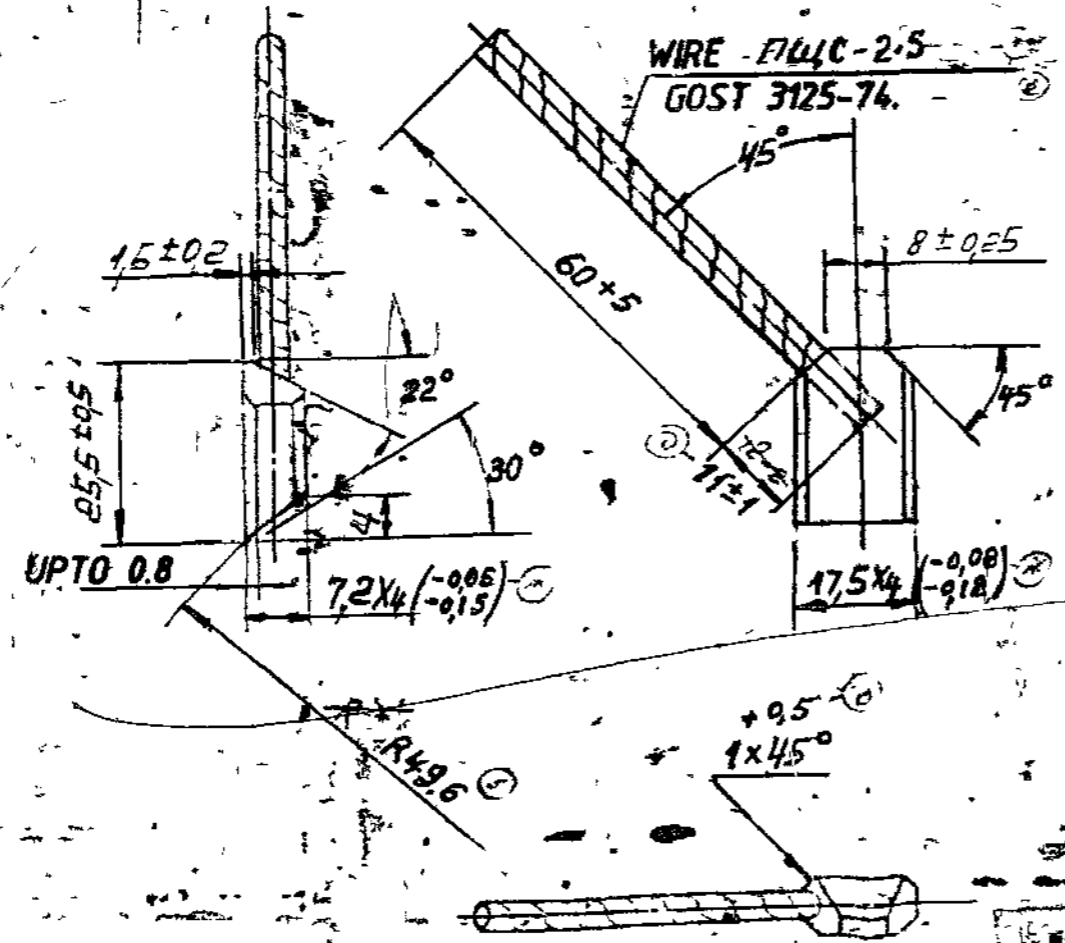
S.No	Designation	Description	Qty	Remarks
4,		Rubber tube ИПП-1338P external φ4x0,5x41±1 TY38-40576-77.	3	
3,	751, 309 H ✓	Contact plate	1	
2,	557, 008 H ✓	Brush	2	
1,	557, 007 H ✓	Brush	1	

PROT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST. MASS 0,05 Kg		TO BE STAMPED OR MARKED WHERE INDICATED THUS * LETTERS 33	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL -	USED ON - 002-145 H
DRN	SCALE- 1:1	CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE- BRUSH	
TCO	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	⊕ ⊖	D S CAT NUMBER
APPO	ALL THREADS CONFORM TO	DRAWING NUMBER 555-182 H	
DATE 9-9-87			

IND

1. Caulker's iron is copper silvered with at least 30% silver content.
2. Force to pull-out standard wire-rope should be at least 12 kg.
3. Sharp corners of upper and lower ends may be blunt upto 0,3m
4. Incomplete caulking of wire is allowed upto 0,5mm from upper end of brush.
5. Tolerance for free dimensions are as per accuracy class 7 A7,B7, for angles $\pm 1^{\circ}30'$.
6. Brushes are supplied without r R*) with additional dimensions "upto 0,8" and 30°.
7. Contact electrical resistance between the body of brush and wire should not exceed 1 m. Ohm.
8. Mark.



X 144
92

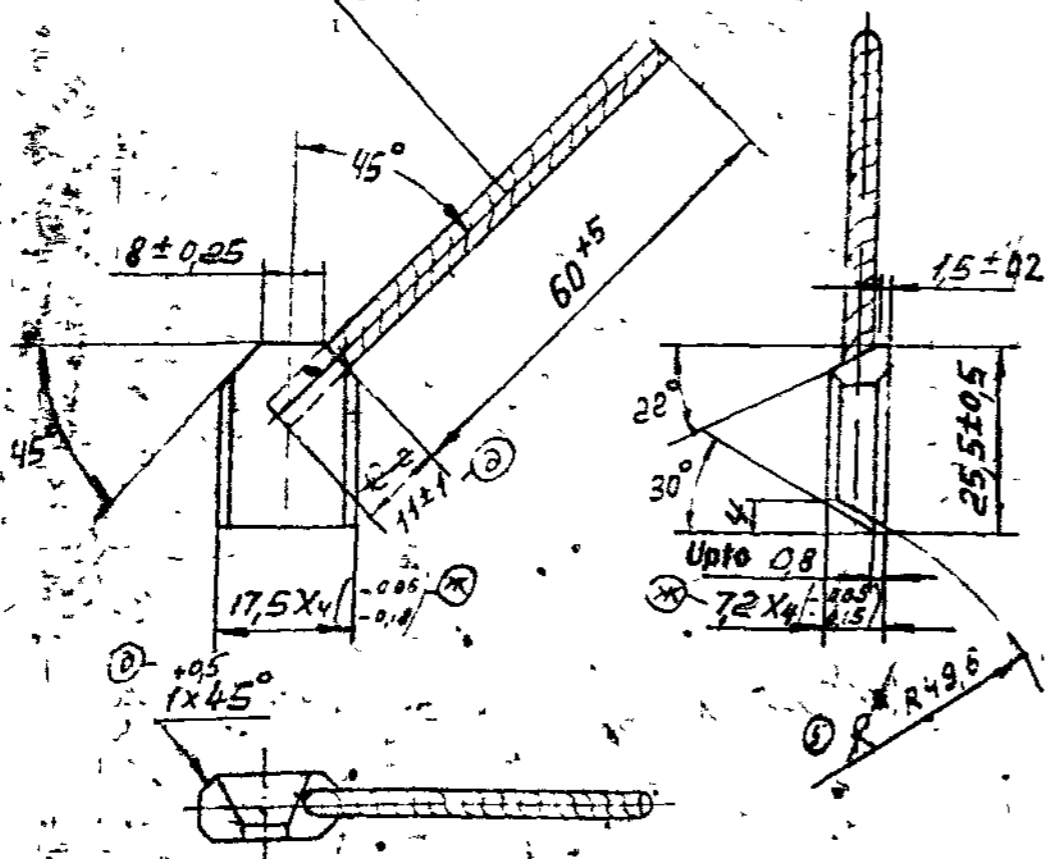
GRADE MFC - 7

PILOT SAMPLE SHOULD BE APPROVED BY A H-S P BEFORE BULK PRODUCTION a. 104

EST MASS 0,013 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS #	LETTERS) (104)
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
DRN	SCALE - 1:1	MATERIAL * SEE ABOVE
HD	DIMENSIONS IN mm	USED ON - 555-182 H
TCB	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	CONTROL DATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD	ALL THREADS CONFORM TO	TITLE
DATE 9-9-87		D & CAT NUMBER
		BRUSH
		DRAWING NUMBER 557-007 H

557-008H

WIRE/WC-2.5 GOST 9125-74



- 1) Caulker's iron is copper silvered with at least 30% silver contact .
- 2) Force to pull-out standard wire-rope should be at least 12 kg .
- 3) Sharp corners of upper and lower ends may be blunt upto 0,3 mm .
- 4) Incomplete caulking of wire is allowed upto 0,5 mm from upper end of brush .
- 5) Brushes are supplied without R *) with additional dimensions upto 0,8 and 30°
- 6) Tolerances for free dimensions are as per accuracy class 7, A7, B7, for angles $\pm 1^\circ 30'$
- 7) Contact electrical resistance between the body of brush and wire should not exceed 1,0 mohm .
- 8) Mark .

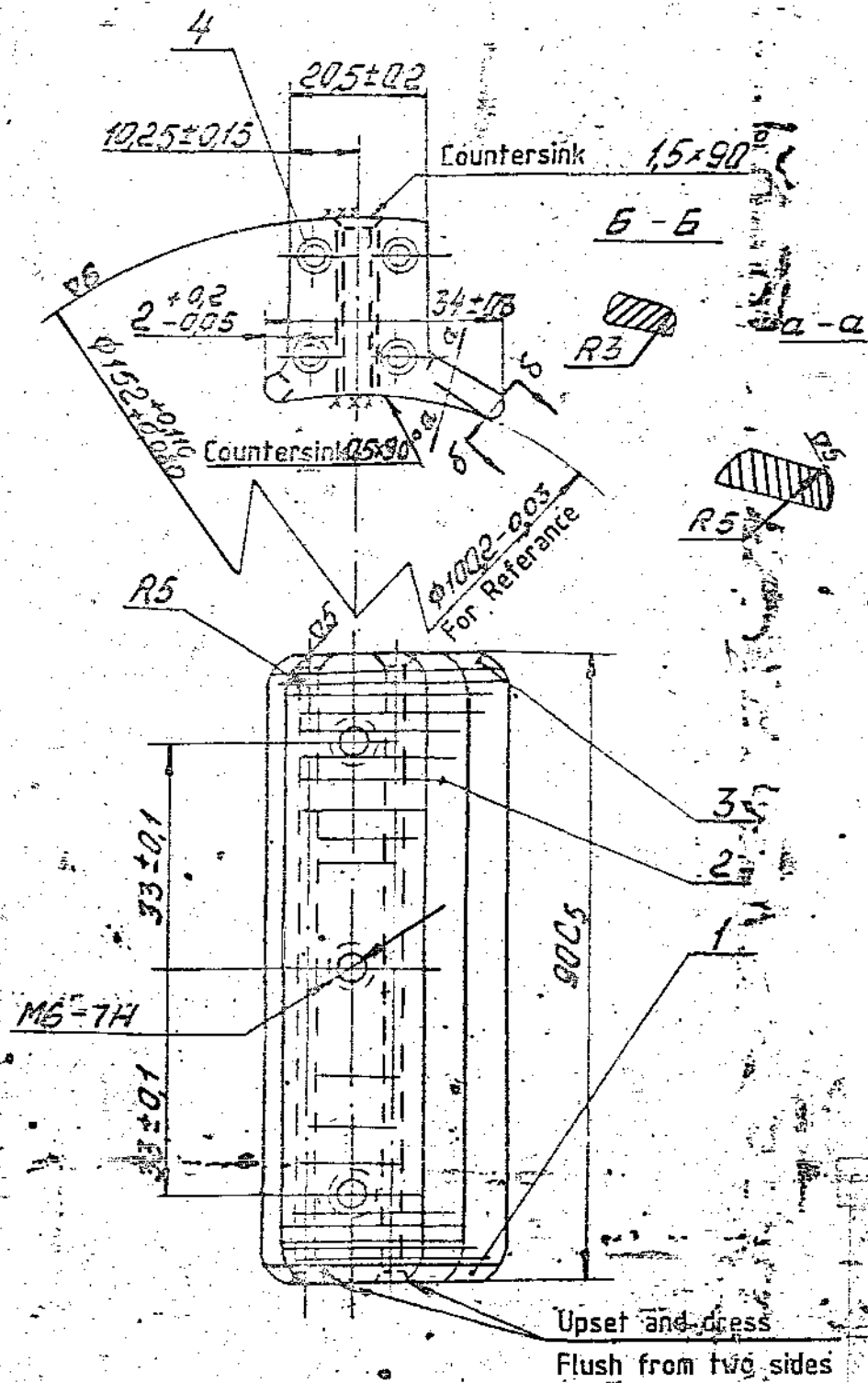
GRADE TTC - X 111

PILOT SAMPLE SHOULD BE APPROVED BY AHS P BEFORE BULK PRODUCTION

		EST. MASS 0,03 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS * LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		SCALE - 1:1	MATERIAL - USED ON - 555-182 H
CHD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
YCD		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: BRUSH
APPD		ALL THREADS CONFORM TO	D S T AT NUMBER
DATE	9-07		DRAWING NUMBER 557-008 H

105

1. Provide smooth change to radii along edges of poles.
2. Coat with varnish Kp-969 as per H8A0028 004. Except for places marked with "XXX"



X 141
19

S.No	Designation	Description	Qty	Remarks
4.		Axle 2201 C 52-3-98-KB	4	Standard
3.	562.076H ✓	Edge plate of pole	1	
2	562.075H ✓	Centre plate of pole	78-93	
1.	562.077H ✓	Edge plate of pole	1	

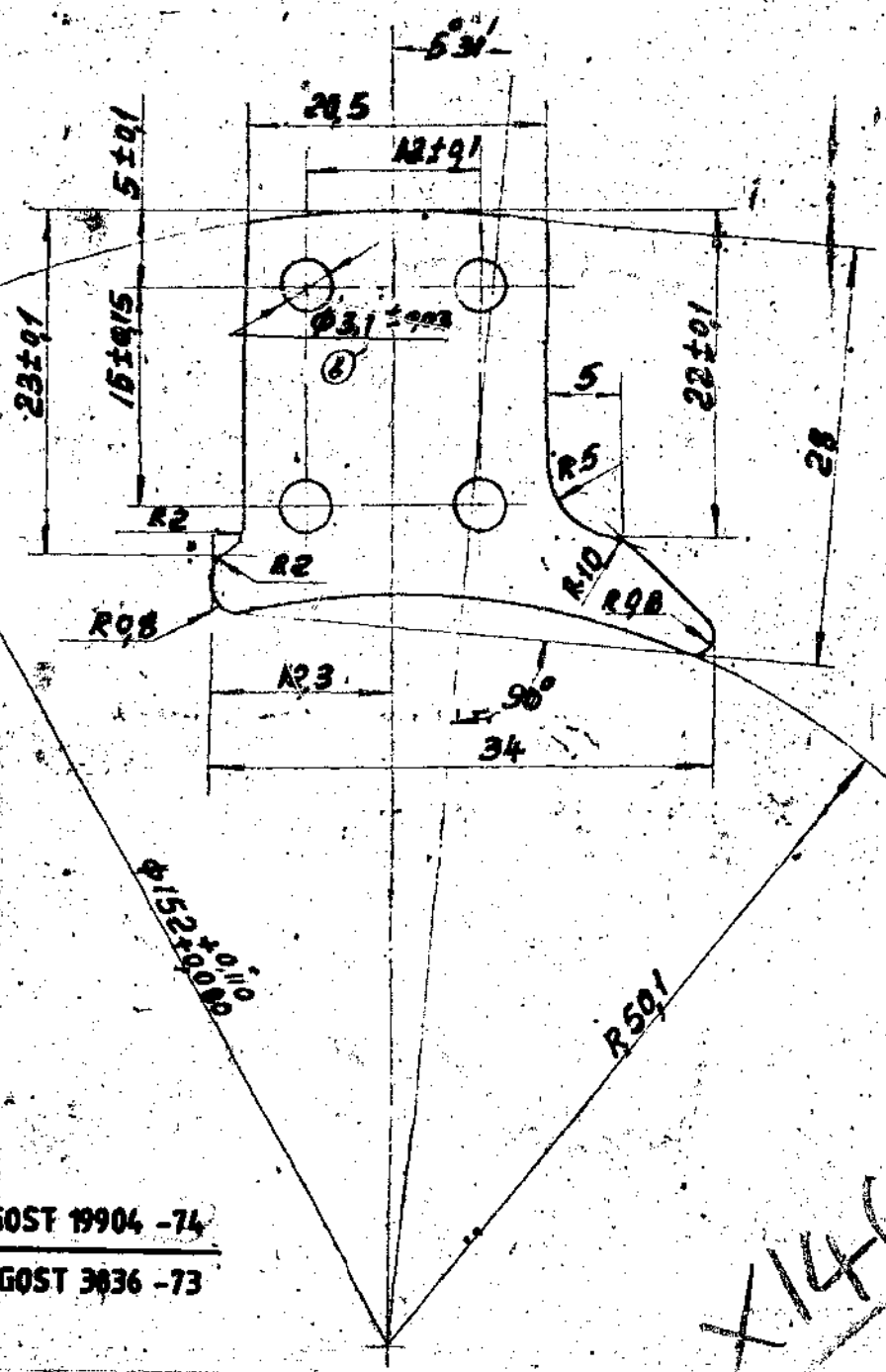
PROT SAMPLE SHOULD BE APPROVED BY A.H.S.P BEFORE BULK PRODUCTION

EST. MASS	TO BE STAMPED OR MARKED WHERE	34
0.4 Kg	OPERATED THUS	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED PROVIDED CORNERS TO HAVE R OUTSIDE		
ISSUE DATE	NATURE OF ASSIGNMENTS	PROVIDE EQUIVALENT CHAMBERS ARE FEASIBLE
OWN	SCALE - 2:1	MATERIAL _____ USED ON 100-256 H
CHD	ENGINEER'S NAME	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	POLE
APPD	ALL DIMENSIONS COMPARE TO	D.S. CAT NUMBER
DATE 9-9-87		DRAWING NUMBER 560 051H

562 075 H

1. TOLERANCES FOR FREE DIMENSIONS ARE AS PER ACCURACY CLASS 4, OST 1014 (A, C₁)
 2. ALLOWANCE FOR MACHINING SHOULD BE GIVEN FOR DIMENSION $\phi 152 \pm 0,110$
 3. ANNEAL AS PER INSTRUCTION TU 2-17. THICKNESS OF SHEET IS 1mm.
 4. ALTERNATE MATERIAL IS SHEET 6-ny-0 GOST 19904-74
- 20864-1 GOST 3036-73.

41
95



AMDT, NOTN, No. 250-78
3220-78
3220-78

SHEET 6-ny-0-GOST 19904 -74
20895 -1 GOST 3036 -73

0-83

PILOT SAMPLE SHOULD BE APPROVED BY A.H.S.P BEFORE BULK PRODUCTION

		EST. MASS 0.0045 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS (LETTERS)
			106
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
DRN	SCALE: 2:1	MATERIAL: * SEE ABOVE	USED ON: 560 051 H
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO	TOLERANCE OF DIMS UNLESS OTHERWISE STATED	TITLE: CENTRE POLE PLATE	
APPO	ALL THREADS CONFORM TO:	D/S CAT NUMBER	DRAWING NUMBER 562 075 H
DATE 9-9-87			

562 076 H

РЕГИСТР №

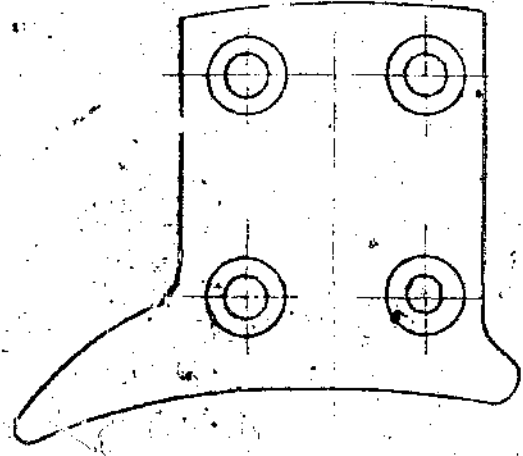
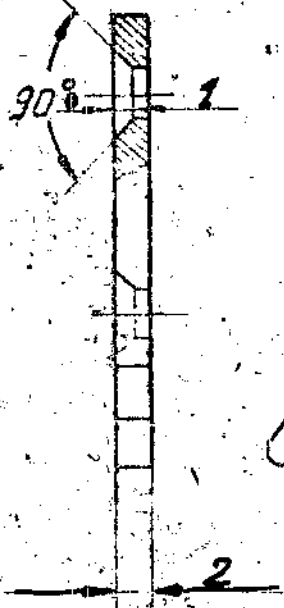
Утвержден:

— все размеры в миллиметрах
— для чертежей систем
— диаметр в мм — 30

- PART MAY BE MADE FROM TWO CENTRE SHEETS BY SPOT WELDING. DRAWING NO. 562:075 H.
- ANNEAL AS PER TU 2-17.
- ALTERNATE MATERIAL IS SHEET Б-ny-0 ГОСТ 19904-74

20864-1 ГОСТ 3836-73

AMDT. NOTN. No: 220-78 220-78



* SHEET Б-ny-0 ГОСТ 19904-74
20895-1-ГОСТ 3836-73

D-83

Q-107

107

PILOT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL * SEE ABOVE	USED ON: 560 051 H
DRN	SCALE:-	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CND	DIMENSIONS IN MET	TITLE: EDGE POLE PLATE	
ICD	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	D S CAT NUMBER	DRAWING NUMBER 562 076 H
APPD	ALL THREADS CONFORM TO		
DATE 9-9-87			

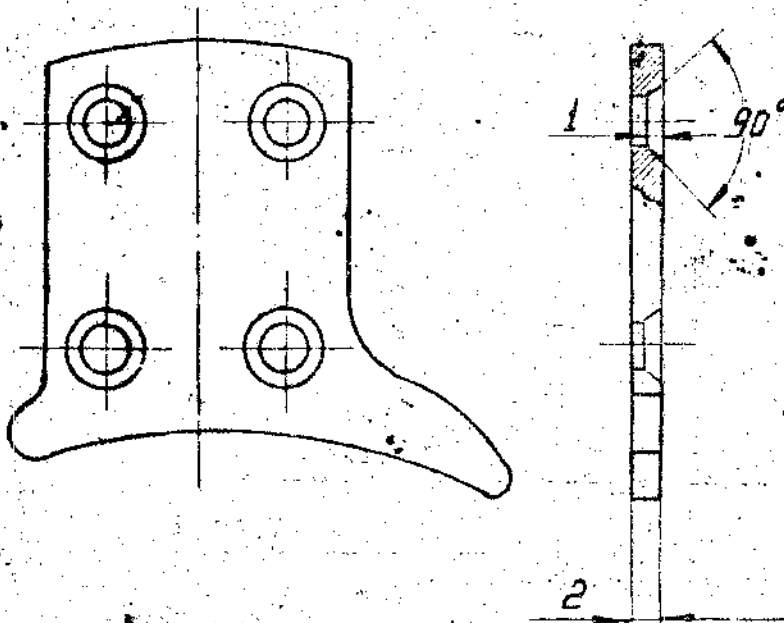
H 562-077

1. Part may be made of two centre sheets by spot welding- drawing no 562.075 H.
2. Anneal as per TU2- 17.
3. Alternate material is: sheet

Б-111-0-1001 19904-74
 20864-1 1001 3836-73

141
 97

AMDT. NOTA. No. 250-73



D-83

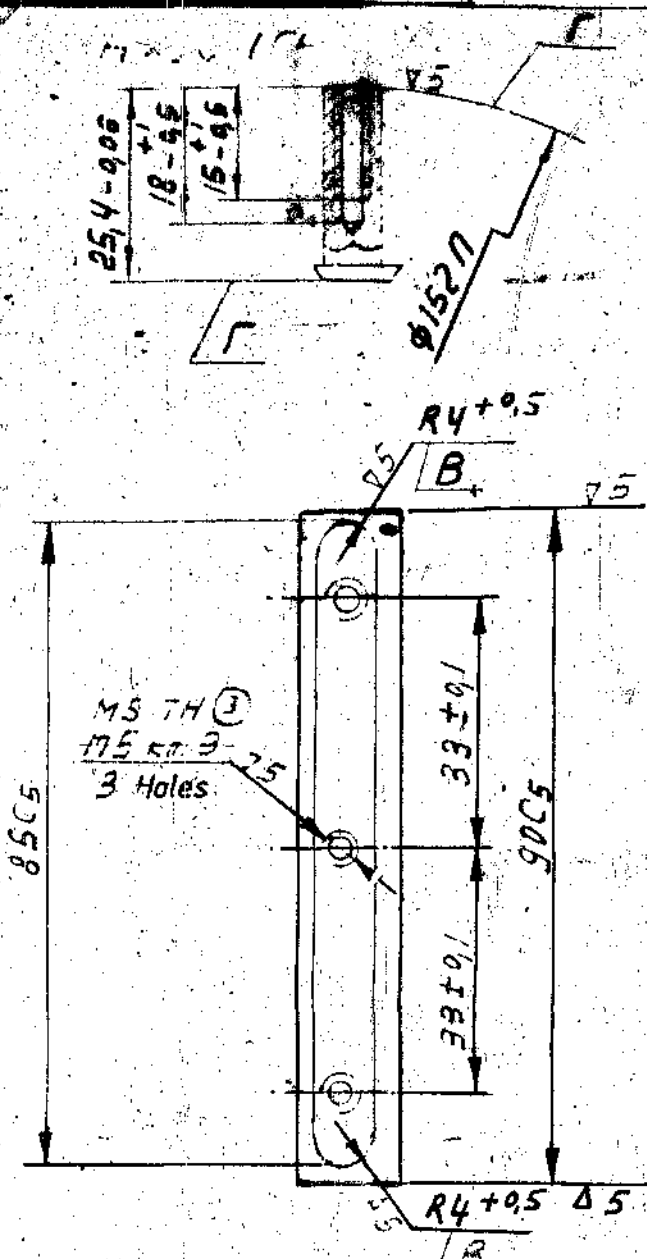
108

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

		EST. MASS 0.009 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON - 560 051 H
DRN	SCALE:- 2:1	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE: EDGE POLE PLATE	
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D.S CAT NUMBER	DRAWING NUMBER
APPD	ALL THREADS CONFORM TO	562 077 H	
DATE 9-9-87			

563 021H

2/10/1



* BLANK: PROFILE AS PER DRG No 456

805-003 H

0-83

1. Round off pole backs with $R 0.6 \pm 0.3$ mm along contour of radii B,
2. Provide complete mating of radii B with lateral surfaces.
3. Threaded chamfers are as per OST 1:00010.71.
4. Coat with Varnish K0-965 as per H8A0.028.004 except for surface F.

Handwritten signature and initials

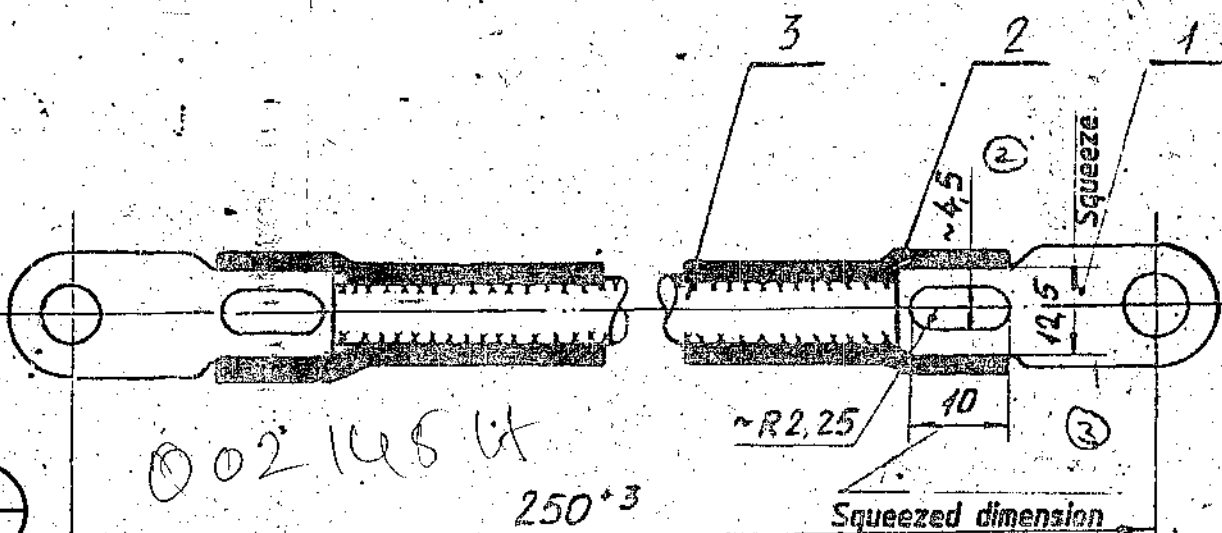
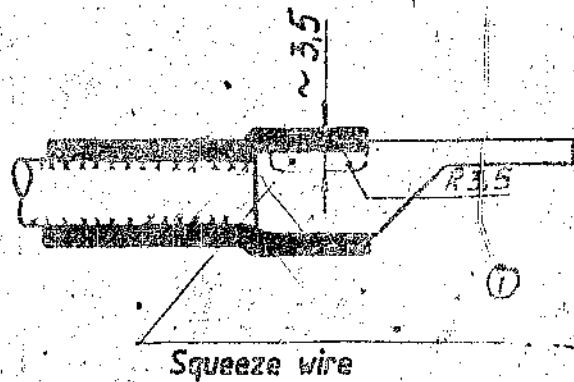
PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

109

EST. MASS 0,135 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R HIGHER EQUIVALENT CHAMFERS ARE PERMISSIBLE	
DATE	NATURE OF AMENDMENTS
DRAWN	SCALE: 1:1
CHKD	DIMENSIONS IN mm
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
APPRO	ALL THREADS CONFORM TO
EST. MASS	0,135 Kg
MATERIAL	* SEE ABOVE
USED ON	805 003 H
CONTROL RATE OF INSPECTION (HEAVY VEHICLES)	AVADI
TITLE	INTER POLE
D/S CAT NUMBER	DRAWING NUMBER 563 021H

700 042H

14
20



AMDT. NOTN. NO: 220-70 8
03

Sl. no	Designation	Description	QTY	Remarks
3	700.042H-1	Conductor bNB 50mm^2		
	TY 16.505.911-76		1	Without drawing
2	700.042H-2	Sleeve III-TB-40-230-14-105		
	GOST 19034-73		2	Without drawing
1	712, 199H ✓	Cable lug	2	

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)	
0.155 Kg		(35)	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- 002-145 H
DRN	SCALE:- 1:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE: LEAD.	
TCO	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	D S CAT NUMBER	
APPO	ALL THREADS CONFORM TO	DRAWING NUMBER	
DATE 9-9-87		700 042 H	

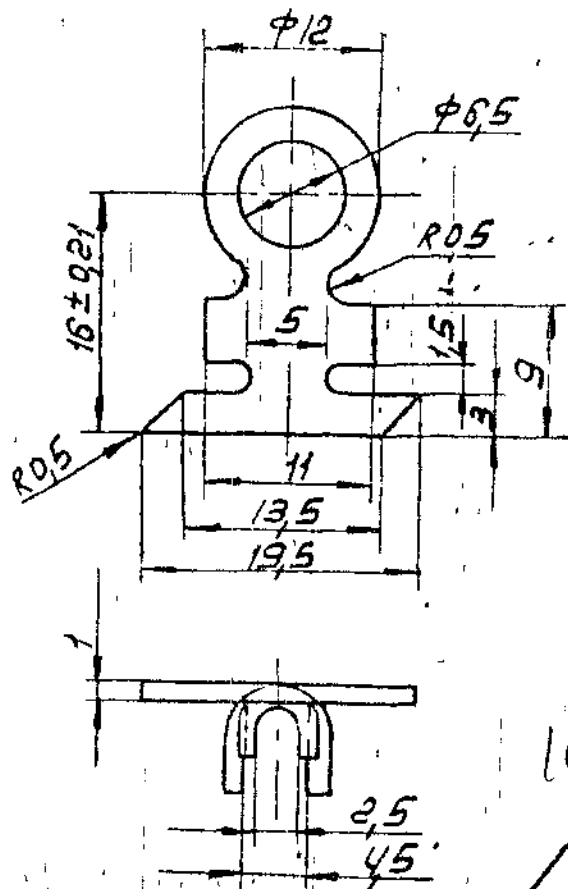
712 198 H

2

1. Tolerances for free dimensions are as per accuracy Class 7, OST 1010.
2. Coating:- 0,3 microns thick with fusion or 0,9 microns thick.

Development

Развертка



0-83

SHEET 1, I.P.H.M. 1/46
GOST 15527-70, GOST 931-78

PILOT SAMPLE SHOULD BE APPROVED BY A.H.S.P. BEFORE BULK PRODUCTION

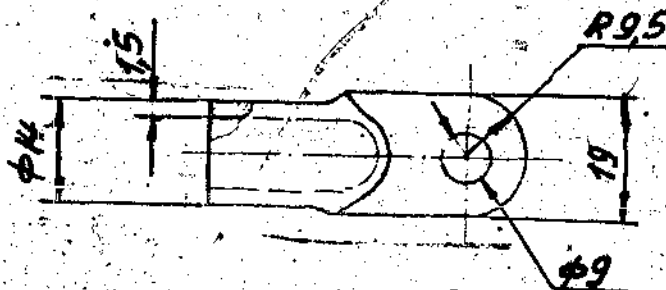
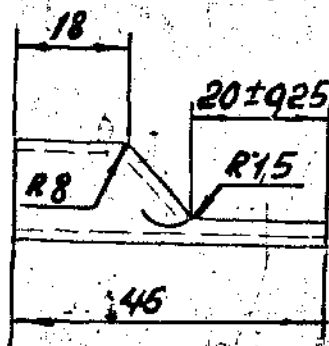
110

EST. MASS 0,002 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)
ISSUE DATE	NATURE OF AMENDMENTS
DRN	SCALE 2:1
CHD	DIMENSIONS IN mm
ICD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
APPO	ALL DIMENSIONS CONFORM TO
DATE 9-9-87	
MATERIAL * SEE ABOVE	USED IN - 100 256 H
CONTROL DATE	SECTION HEAVY VEHICLES; AVADI
	CABLE LUG
	712 198 H

712/199 H

14/100

1. Tolerances for free dimensions are as per accuracy class 7, OST 1010.
2. Part may be trimmed along dimension 19, permissible displacement of hole centre of $\phi 9$ mm should not exceed $\pm 0,2$ mm.
3. Coating: 0,3 microns thick with fusion or 0,9 microns thick.



COPPER PIPE M3
GOST 617-72

AMDT. NOTN. No: 0009-82

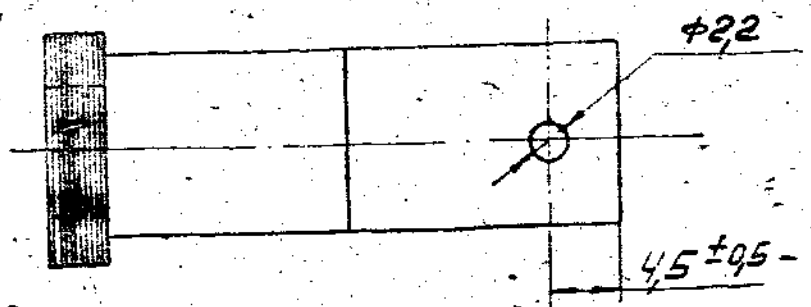
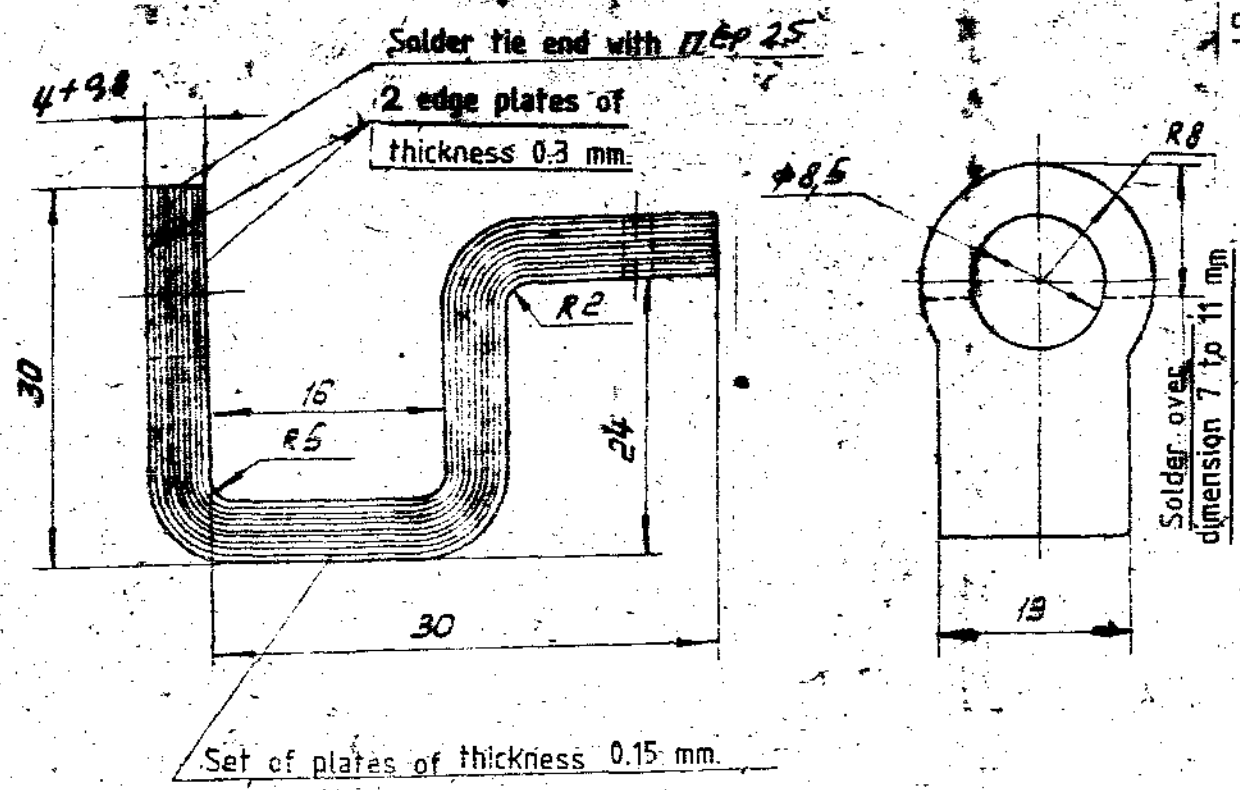
D-83

4. Butt-end may be drawn tight upto 2 mm.

PILOT SAMPLE SHOULD BE APPROVED BY A.I.S.P BEFORE BULK PRODUCTION

		EST. MASS	TO BE STAMPED OR INDICATED THUS	(111)
		0.02 Kg	LETTERS	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE		
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON
DRN		SCALE: - 1:1	* SEE ABOVE	700-042-H
END		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	⊕ ⊖	TITLE: CABLE LUG
APPO		ALL THREADS TO CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE	9-9-87			712 199 H

1. Tolerances for free dimensions as per accuracy class 7, OST 1010.
2. Permissible non-parallelity of contact surfaces should not exceed 0.3 mm.
3. Splicing of unsoldered end and spring properties release are allowed as per dimensions 24: 30 and 16.
4. Dress and degrease blanks.
5. Alternate material is copper M3M GOST 1173-77.



2	0024-01	2	Рисунки
1	220-18	2	Виды
2	72-130	2	Листы

Лист: 1 из 1

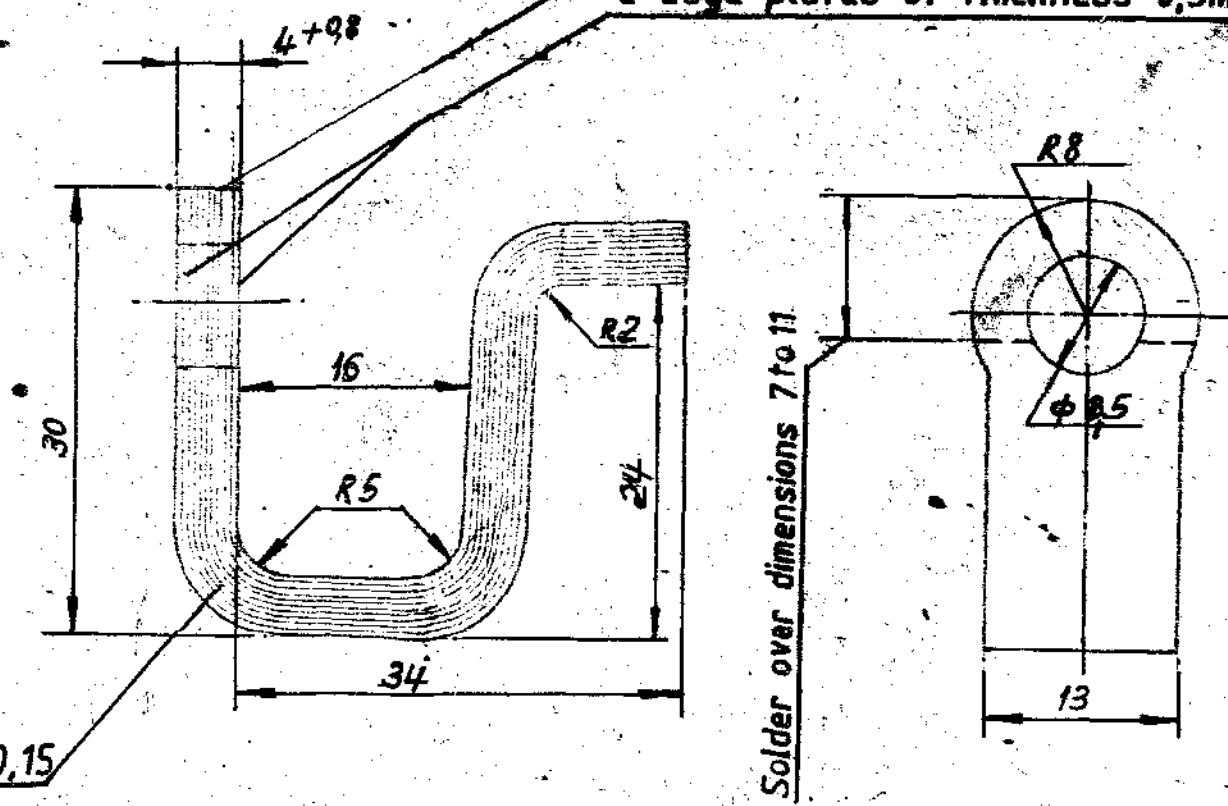
* COPPER M3M GOST 1173-77

PILOT SAMPLE SHOULD BE APPROVED BY AHS P BEFORE BULK PRODUCTION

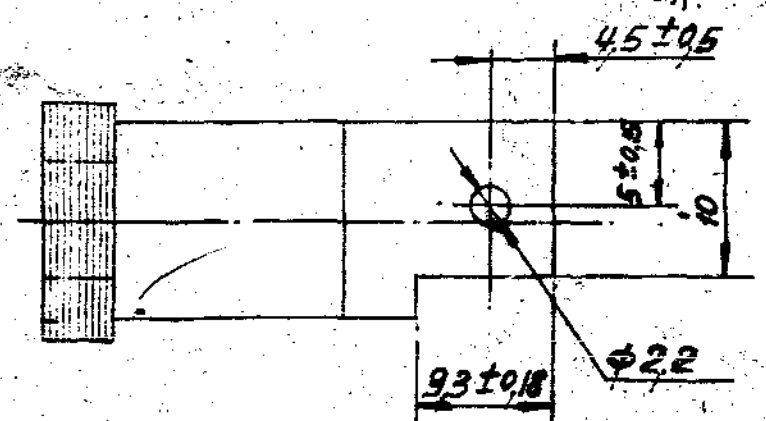
112

EST. MASS 0,033 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS IN LETTERS
ALL SHARP EDGES AND CORNERS TO BE BEVELLED UNLESS OTHERWISE STATED. MACHINED CORNER TO HAVE R OUTSIDE. R IN GROOVE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	NATURE OF AMENDMENTS
DRN	SCALE: 2:1
CD	DIMENSIONS IN MM
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
APPD	ALL THREADS TO CONFORM TO
DATE 9-9-87	
MATERIAL: * SEE ABOVE	USED ON: 805 003 H
CONTROLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	TITLE: TIE
D S CAT NUMBER	DRAWING NUMBER 721-130 H

Solder tie end with ncp 25.
2 Edge plates of thickness 0,3mm.



Set from plates of thickness 0,15



- 1) Tolerances for free dimensions are as per accuracy class 7, OST 1010
- 2) Permissible non-parallelity of contact surfaces should not exceed 0,3 mm.
- 3) Splicing of unsoldered end and release of spring properties as per dimensions 24,30,16 and 34 are allowed.
- 4) Dress and degrease blank.
- 5) Alternate material is copper M3M GOST 1173-77.

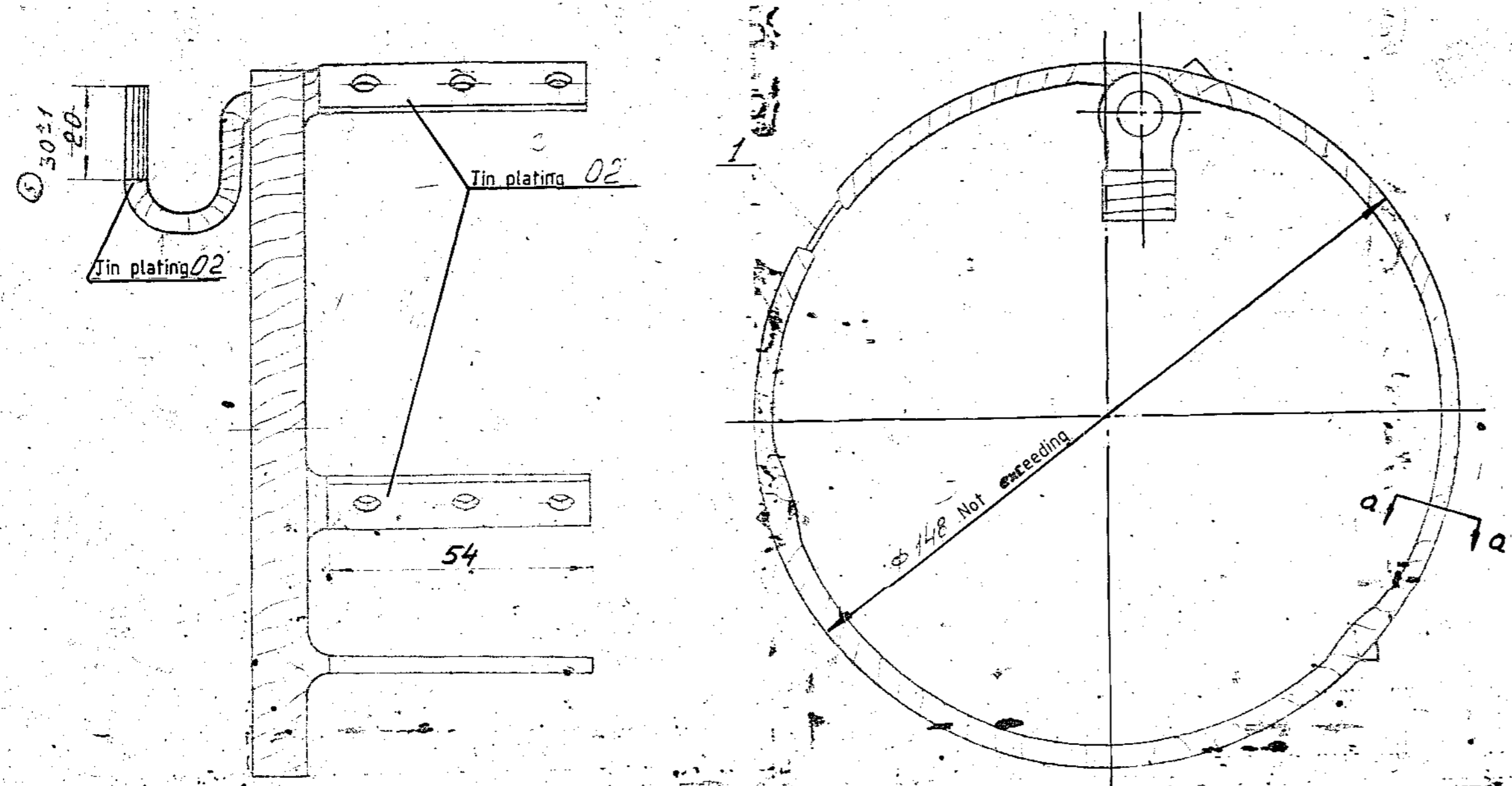
* COPPER M3M GOST 1173-77

113

PROT SAMPLE SHOULD BE APPROVED BY AHS P BEFORE BULK PRODUCTION

EST. MASS 0,03 Kg		TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE A OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL	USED ON - 725 040 H
DRN COK	SCALE: - 2:1	* SEE ABOVE	
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: TIE	
APPO	ALL THREADS CONFORM TO	D'S CAT NUMBER	DRAWING NUMBER 721-132 H
DATE 9-9-87			

725.039H



1. Lay electric-grade card board, ref.no. 5, in a box-shape manner from the contact plate side after which insulate them with varnished silk, ref.NO.4, in one layer half-over lapping.
2. Lay the electric-grade card-board from inner side along the whole circumference of ring. Then insulate them with cotton band,ref.no.3 in one layer half over lapping.
3. Impregnate as per H8A 0028001 (Section 3 "A") and coat the insulated part of connection with enamel ϕ -952 TY 6-10. 1303-77, except the flexible bar and dry as per the section 3:5", item 3.20.
4. Insulated part of bar in the body unit may be coated with enamel ϕ -952 TY 6-10-1303-77.

S.No.	Designation	Description	Qty.	Remarks
		Tin 02 GOST 860-75		
5	725.039H-4	Electric grade-card-board. 3BT 02		
		GOST 2824-74.	1	"
4	725.039H-2	Varnished fabric AUMC-105-006		
		GOST 2214-78.	1	"
3	725.039H-3	Cotton batiste(lawn) tape		
		5-20-61 GOST 4514-78.	1	"
2	725.039H-5	Electric-grade card-board		
		3BT 0.4 GOST 2824-75.	1	Without drawing
1	725.040H-	Interbrush connection	1	

a-a
 2
 3
 4
 5

6 - 0057-82
 5 - 0053-82
 4 - 0020-81
 3 - 0024-79
 2 - 220-78
 1 - 150-78
 7-9-87

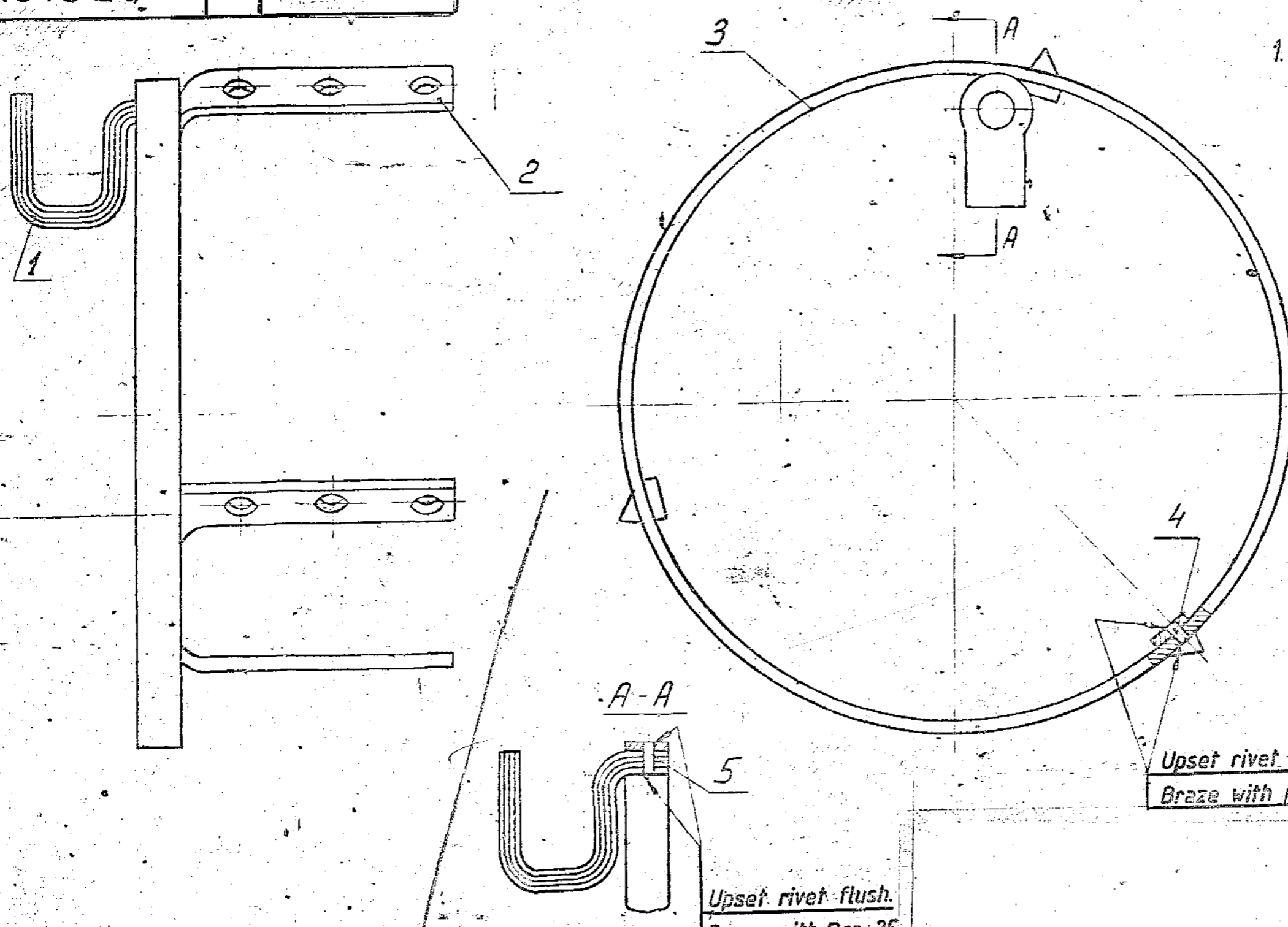
PILOT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

EST. MASS	0.19 kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. MACHINED CORNER TO HAVE R OUTSIDE. IN HOUSE EQUIVALENT CHARACTERS ARE PERMISSIBLE.		
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL
DRW	SCALE: 1:1	USED ON: 100 256H
CHKD	DIMENSIONS IN mm	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVAD
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: INTER BRUSH CONNECTION
APPR	ALL THREADS TO CONFORM TO	D S CAT NUMBER
DATE 9-9-87		DRAWING NUMBER 725 039 H

36

D83

725.040H



1. Parts, Ref. no. 2 are permitted to be brazed by resistance brazing with solder ncp - 71 without rivetting

Upset rivet flush.
Braze with ncp-25.

Upset rivet flush.
Braze with ncp-25.

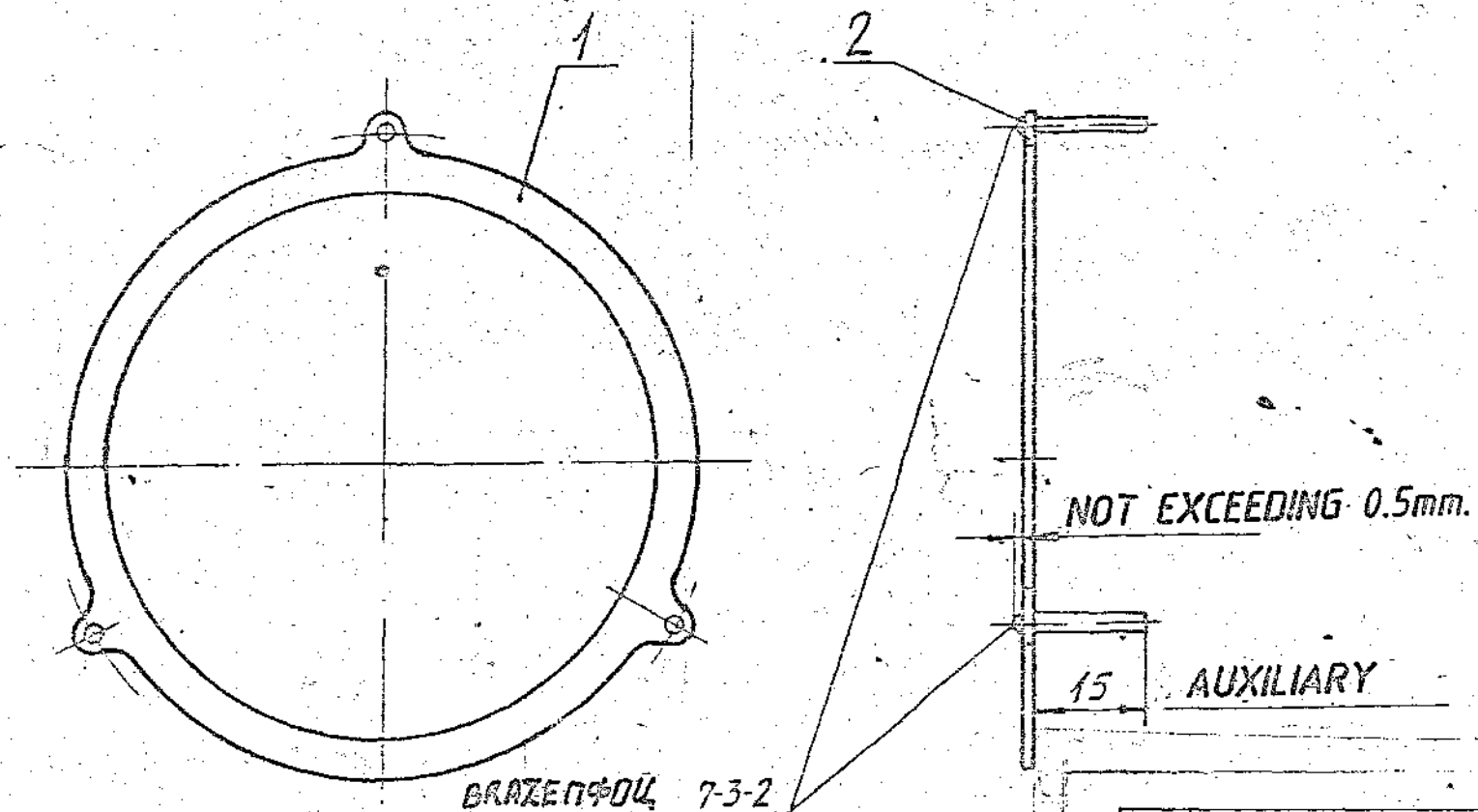
S.No	DESIGNATION	DESCRIPTION	QTY.	REMARKS
		Solder- ncp-71 GOCT 19738-74		
		Solder- ncp-25 GOCT 19738-74		
5		Rivet 3525 A-2-10	1	Standard
4		Rivet 35 25A-2-B	3	Standard
3	531.011 H ✓	Contact ring	1	
2	751.120 H ✓	Contact plate	1	
	721.132 H ✓	Tie	1	

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST MASS	0,15 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS Φ LETTERS
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
DRW C.P.R.	SCALE: 1:1	MATERIAL: - USED ON: 725 039 H
CHKD [Signature]	DIMENSIONS IN mm	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADI
TCD [Signature]	TOLERANCE ON DIMMS UNLESS OTHERWISE STATED	TITLE: INTERBRUSH CONNECTION
APPO [Signature]	ALL THREADS CONFORM TO	D S CAT NUMBER
DATE 9-9-87		DRAWING NUMBER 725-040H

МОН 056

1. Carry-out pickling.
2. Bulging of solder is allowed to be upto 1 mm. in zone beyond ϕ 90,2 MM.
3. Pins may be made with heads of diameter 1,0 B₅. Height 0,5_{-0,2} and semicircular-form,



S. L. NO.	Designation	Description	Qty	Remarks
2	750-170H-1	Solder n ϕ 04, 7-3-2 OST190056-72		
		Wire MT -120 GOST 2112-79	3	
1	751-237H	Contact plate	1	

PROT SAMPLE SHOULD BE APPROVED BY AUTHORITY BEFORE BEING PRODUCED

ISSUE DATE: _____ NATURE OF AMENDMENTS: _____

DATE: _____ SCALE: 1:1

DESIGNER: _____ DIMENSIONS IN mm: _____

TOLERANCE ON DIMS UNLESS OTHERWISE STATED: _____

DATE: 9-9-07 ALL THREADS TO CONFORM TO: _____

TO BE STAMPED ON INDICATED PARTS BY: _____ LETTERS: _____

ALL SHARP EDGES AND CORNERS TO BE ROUNDED UNLESS OTHERWISE STATED (DIMENSIONS COMMON TO HAVE ROUNDED - R. IN THE EQUIVALENT CHANGING AND PERIODICITY)

ISSUE NO: 750 171 H

CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADI

CONTACT PLATE

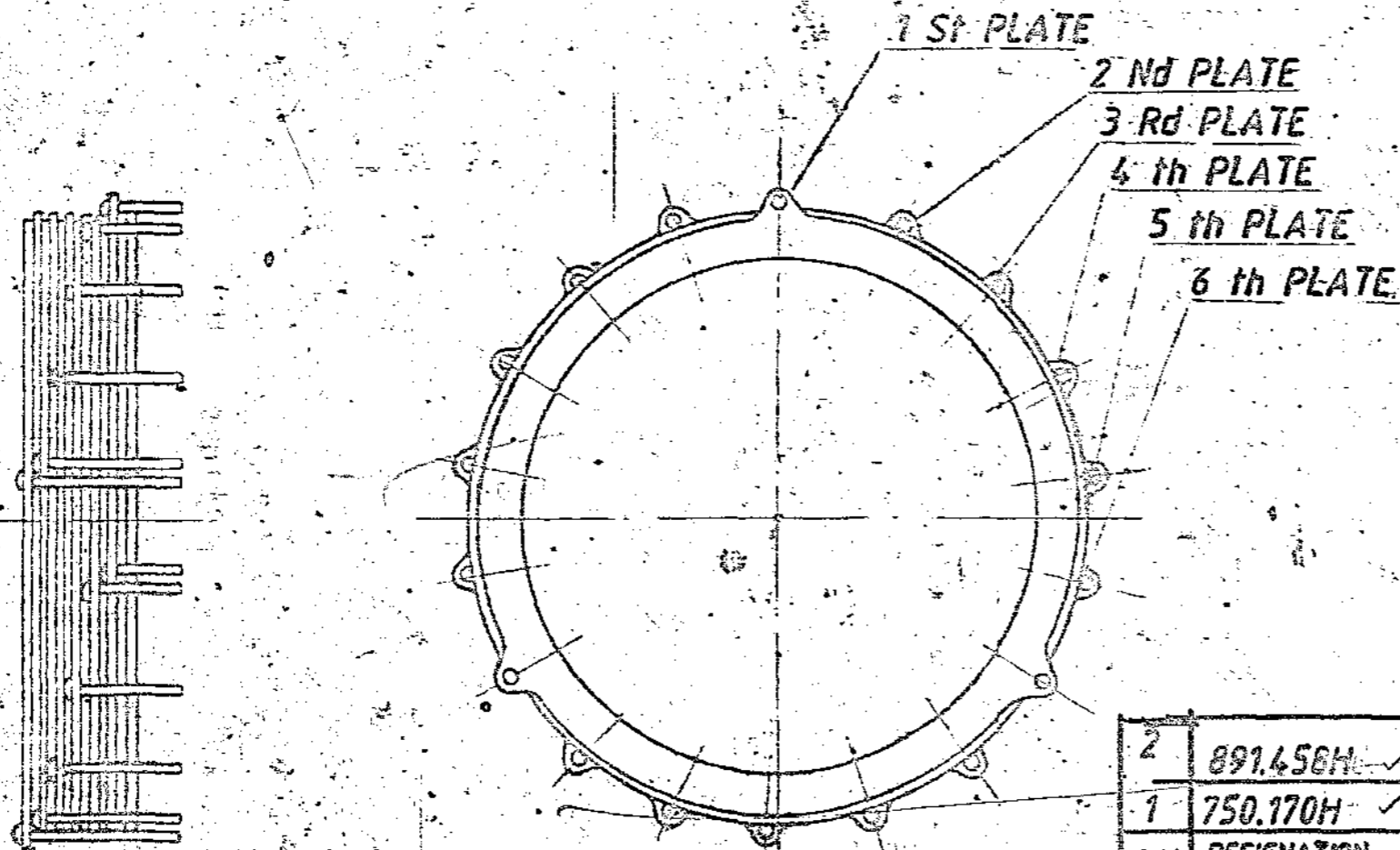
D.S. CAT NUMBER: _____ DRAWING NUMBER: 750 170 H

(38)

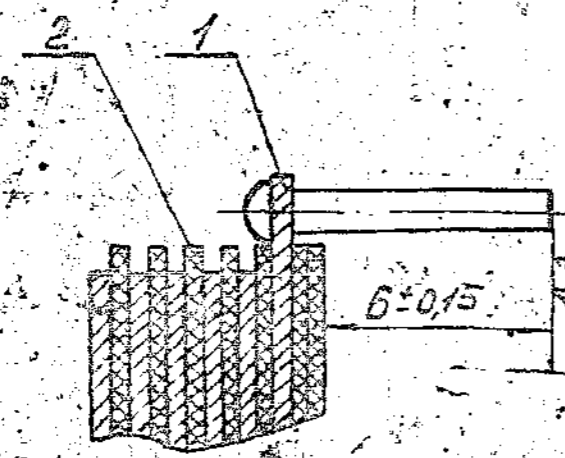
750.171H

Резерв 30
Утеплена

1. After welding ^{pins} of contact plates, Ref. No. 1, should be cut to obtain dimension $6 \pm 0,15\text{mm}$,
2. Contact plates, Ref.No. 1 and washer, Ref.No.2 should be placed on armature in sequence as shown in drawing,



S.NO	DESIGNATION	DESCRIPTION	QTY	REMARKS
2	891.456H ✓	INSULATION WASHER	7	
1	750.170H ✓	CONTACT PLATE	6	



PLOT SAMPLE SHOULD BE APPROVED BY A.H.S.P. BEFORE BEGIN PRODUCTION

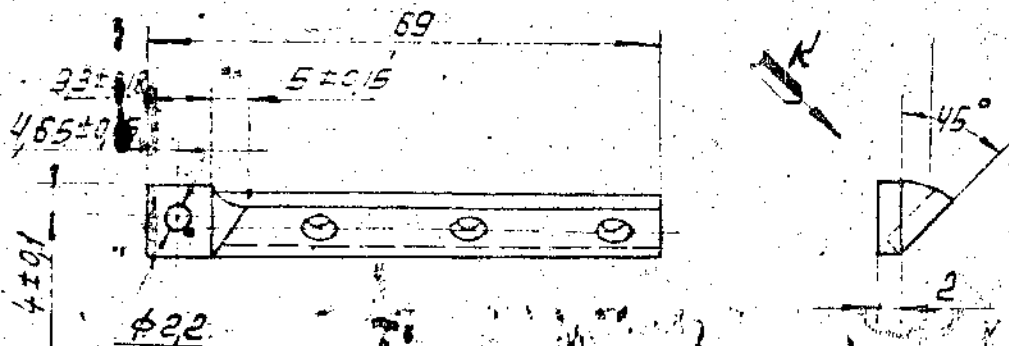
ISSUE DATE	NATURE OF AMENDMENTS	EST. MARK	TO BE STAMPED OR FORW. THIS W/
DRG [Signature]	SCALE: 1:1		LETTERS)
CHK [Signature]	DIMENSIONS IN mm	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. ROUNDED CORNER TO HAVE R OUTSIDE	
TCU [Signature]	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	MATERIAL: —	USED ON: 500 155 H
APP [Signature]	ALL THREADS TO CONFORM TO	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
DATE 9-9-87		TITLE: CONTACT PLATE	
		D S CAT NUMBER	DRAWING NUMBER 750 171 H

39

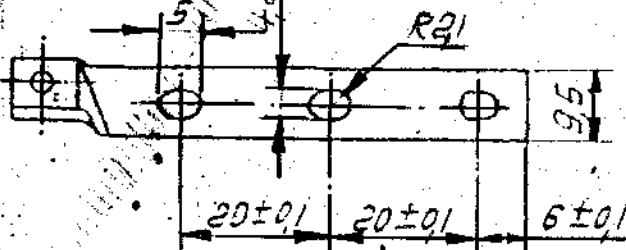
D83

751 115 H

1. Tolerances for free dimensions are as per accuracy class OST 1010.
2. Alternate material is sheet Д17РНММ 3 Gost 495-77.



View along arrow K



805-003 H

D-83

SHEET Д. ПРММ М1 GOST 495-77

PROT SAMPLE SHOULD BE APPROVED BY AHS P BEFORE BULK PRODUCTION

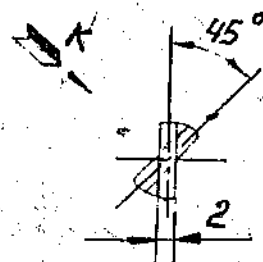
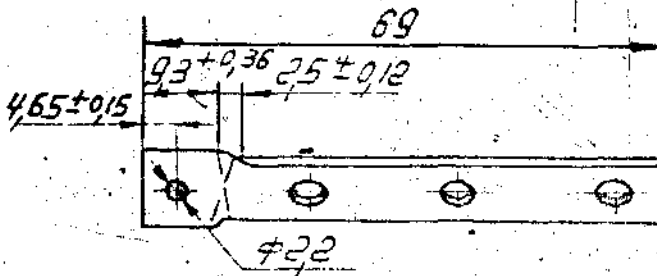
		EST. MASS 0,013 Kg	TO BE STAMPED OR INDICATED THUS: 114 (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRW		SCALE: - 1:1	MATERIAL: * SEE ABOVE
CHD		DIMENSIONS IN mm	USED ON: 805 003 H
TCD		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI
APPO		ALL THREADS TO CONFORM TO	TITLE: CONTACT PLATE
DATE 9-9-87			D'S CAT NUMBER
			DRAWING NUMBER 751 115 H

751 128 H

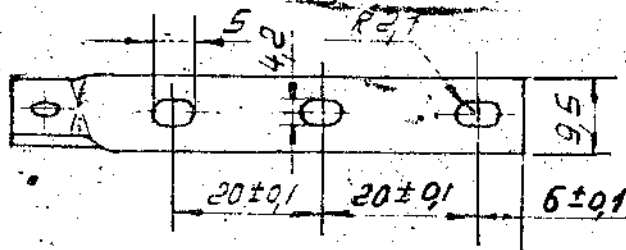
AVADI
10.5

2

1. Tolerances for free dimensions are as per accuracy class 7, OST 1010.
2. Alternate material is sheet АПРММ М3. GOST 495-77.



VIEW K



SHEET АПРММ М1

130

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

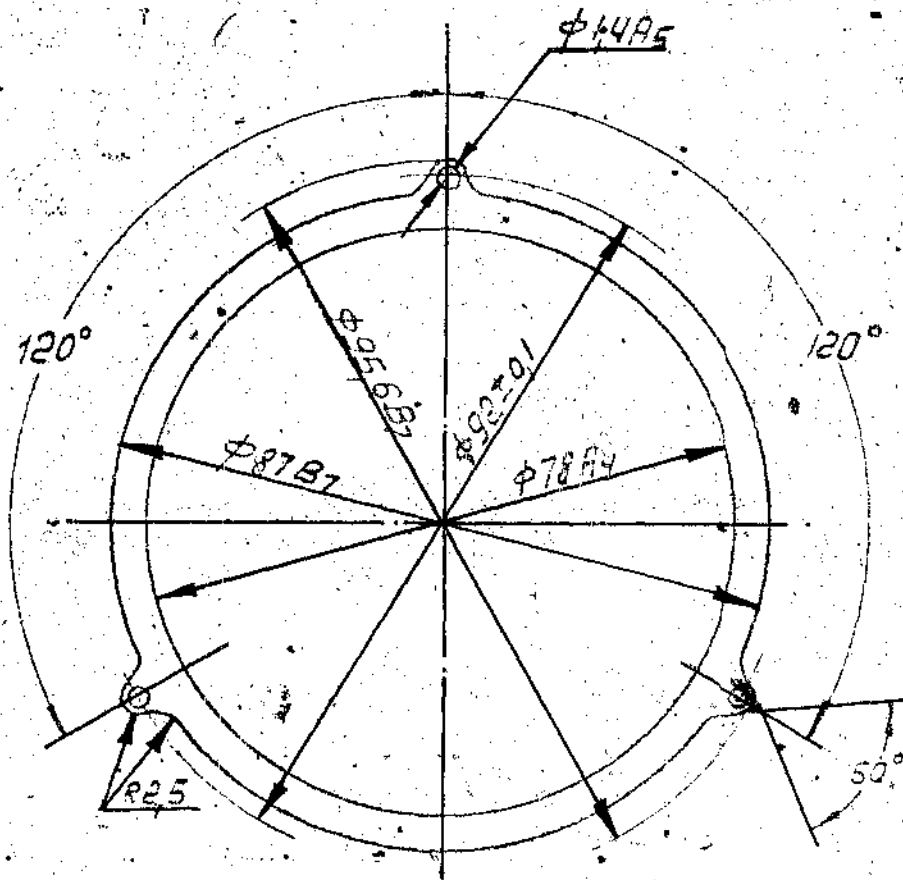
DB3

		EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS IS	
				(LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-		USED ON :- 725-040 H	
DWN <i>Cpl</i>	SCALE :-	* SEE ABOVE			
CHD <i>Pls</i>	DIMENSIONS IN mm	CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI			
APPD <i>Pls</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D'S CAT NUMBER		DRAWING NUMBER	
DATE 9-9-87	ALL THREADS CONFORM TO			751-128 H	
		CONTACT PLATE			

751 237 H

2

141
104



Alternate material is sheet Δ PHM M1 GOST 495-77 of thickness 0,5 mm.

0-83

115

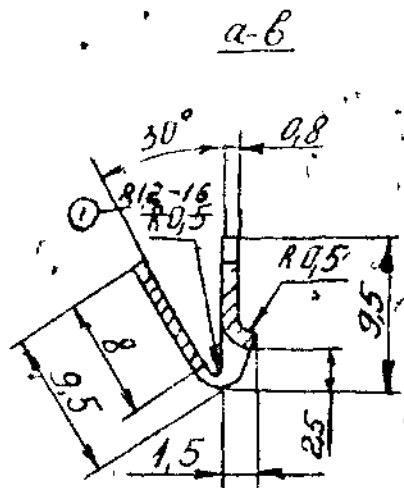
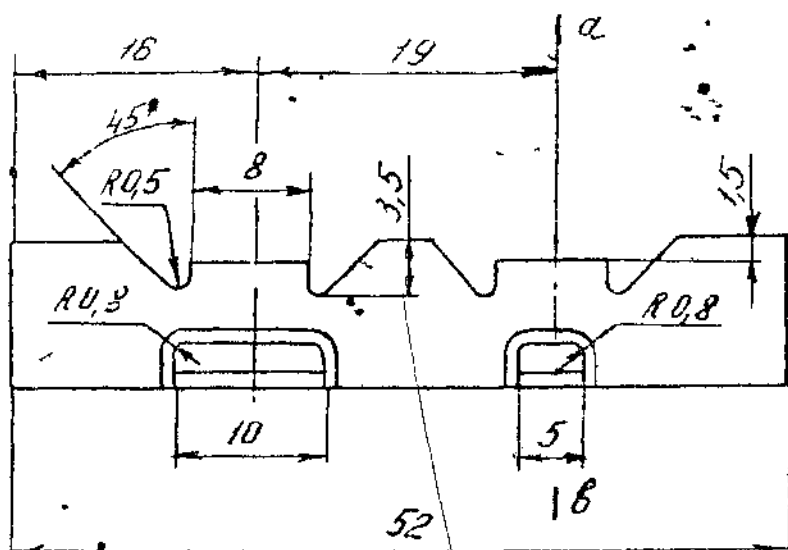
PROT SAMPLE SHOULD BE APPROVED BY AHSB BEFORE BULK PRODUCTION

		NET MASS 0.004 Kg		TO BE STAMPED OR INDICATED THIS WAY (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED FACED CORNER TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE	DATE	NATURE OF AMENDMENTS		MATERIAL: SHEET PLATE PHM M1 GOST 495-77	
DRN		SCALE: 1:1		USED ON: 750 170 H	
END		DIMENSIONS IN mm		CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO		TOLERANCE ON DIMS UNLESS OTHERWISE STATED		TITLE: CONTACT PLATE	
APPD		ALL THREADS TO CONFORM TO		D/S CAT NUMBER	
DATE: 9-9-87				DRAWING NUMBER 751 237 H	

751-309H

IND

1. Tolerances for free dimensions are as per 22AT 52
2. Surface ruptures of material to depth not exceeding 0,2 mm are allowed in the corners of flanging,



AMDT, NGTN, No: 0057-82

* SHEET 0.8x710x1410 M.D. GOST 931-78
Л. ПРМ/08 А 63

D-83

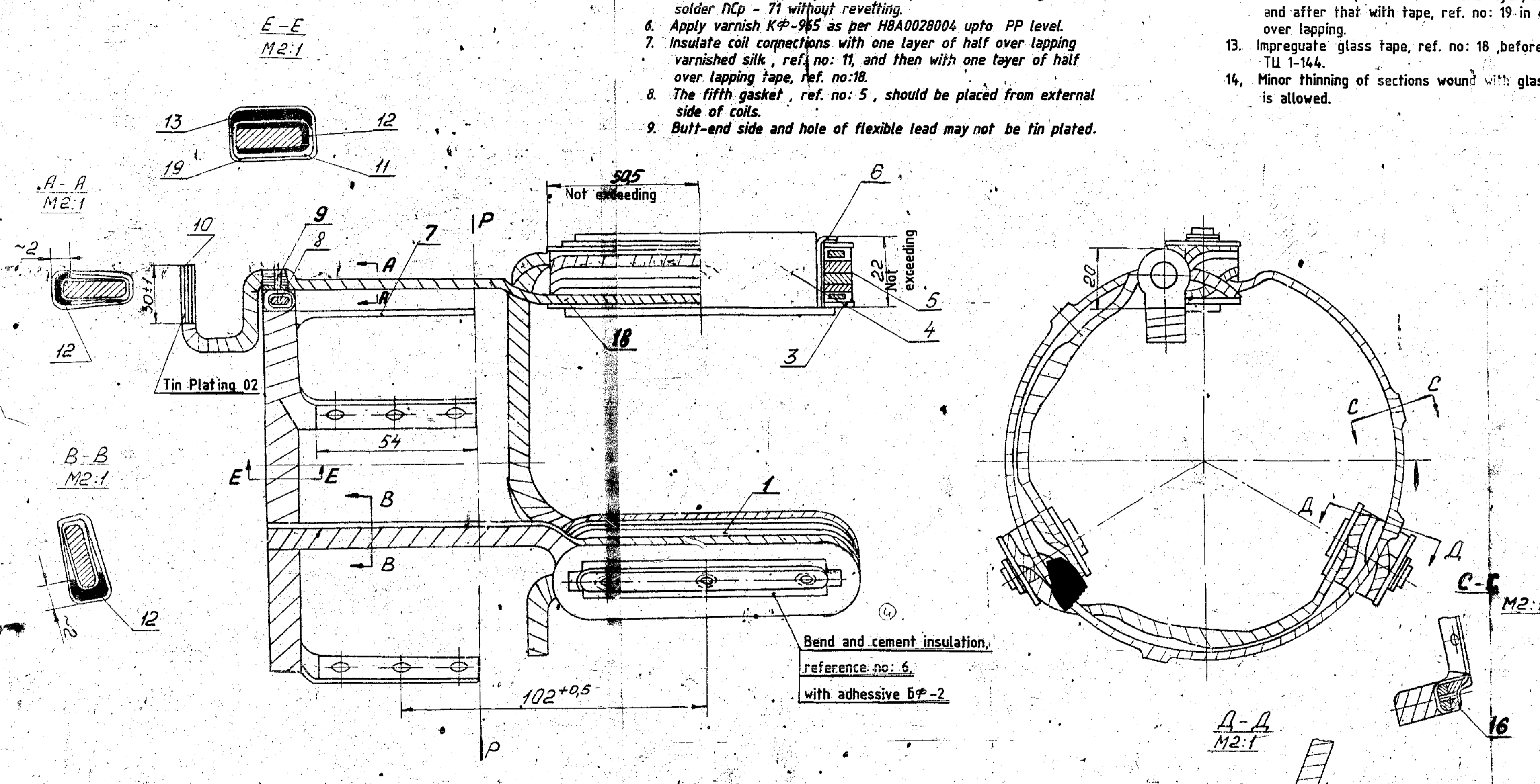
PILOT SAMPLE SHOULD BE APPROVED BY A.H.S.P BEFORE BULK PRODUCTION

116

		EST. MASS 0,005 Kg	TO BE STAMPED OR INDICATED THUS * LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		SCALE - 2.1	MATERIAL - * SEE ABOVE
CHD		DIMENSIONS IN mm	USED ON :- 555-102 H
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD		ALL THREADS TO CONFORM TO	TITLE: CONTACT PLATE
DATE 9-9-87			D S CAT NUMBER
			DRAWING NUMBER 751-309H

116

H200500



1. Braze riveted places and connections with NCp-25 .
2. File the rivet heads after brazing.
3. Insulate pole with film card-board ref. no 6.
4. Insulate the whole surface of ring all round additionally with electric-grade card-board, ref. no: 13 before insulating it with tape, ref. no: 19.
5. Part, ref. no: 7 may be brazed by resistance brazing with solder NCp-71 without revetting.
6. Apply varnish $K\phi-9\phi 5$ as per H8A0028004 upto PP level.
7. Insulate coil connections with one layer of half over lapping varnished silk, ref. no: 11, and then with one layer of half over lapping tape, ref. no: 18.
8. The fifth gasket, ref. no: 5, should be placed from external side of coils.
9. Butt-end side and hole of flexible lead may not be tin plated.

10. Coat contact plates, ref. no: 7, and ring, ref. no: 8, 0.6 microns thick.
11. Insulate coils with all windings together in one layer of half-over lapping glass tape, ref. no: 18, (Insulation is not shown in the drawings).
12. Insulate coil ring and leads upto intercoil connections with varnished silk, ref. no: 11 in one layer, half over lapping and after that with tape, ref. no: 19 in one layer, half over lapping.
13. Impreguate glass tape, ref. no: 18, before insulation as per TU 1-144.
14. Minor thinning of sections wound with glass tape, ref. no: 18, is allowed.

S.NO	DESIGNATION	DESCRIPTION	QTY	REMARKS
		ADHESIVE $B\phi-2$		GOST 12172-74
		SOLDER NCp-71		GOST 19738-74
		SOLDER NCp-25		GOST 19738-74
18.		GLASS TAPE $\text{J}\Omega\text{C-0.1}$	3	
16.		RIVET 3525A-2-6	3	STANDARD
15.		RIVET 3525A-2-8	1	STANDARD
14.	805 . 003 H-6	CAMBRIC-COTTON TAPE	6	GOST 4514-71
		0.8 x 20		
13.	805 . 003 H-9	ELECTIC-GRADE CARD-BOA-		
		RD "3B" 0.5 GOST 2824-75	1	
12.	805 . 003 H-8	ELECTRIC-GRADE CARD-BOA-		
		RD "3B1" 0.1 GOST 2824-75	3	
11.	805 . 003 H-5	VARNISHED FABRIC $\text{J}\Omega\text{WMC}$		
		-105-0.06 GOST 2214-78.	6	
10.	721 . 130 H	TIE	1	
9.	3525A - 2 - 10	RIVET	1	STANDARD
8.	531 . 010 H	CONTACT RING	1	
7.	751 . 115 H	Contact plate	3	
6.	805 . 003 H-3	$\text{J}\Omega\text{K 0.17 TY 16-503.138-74}$	3	
5.	893 . 249 H	Insulation gasket	15	
4.	563 . 021 H	Inter pole	3	
3.	893 . 250 H	Insulation gasket	6	
1.	805 . 004 H	Inter pole coil	1	

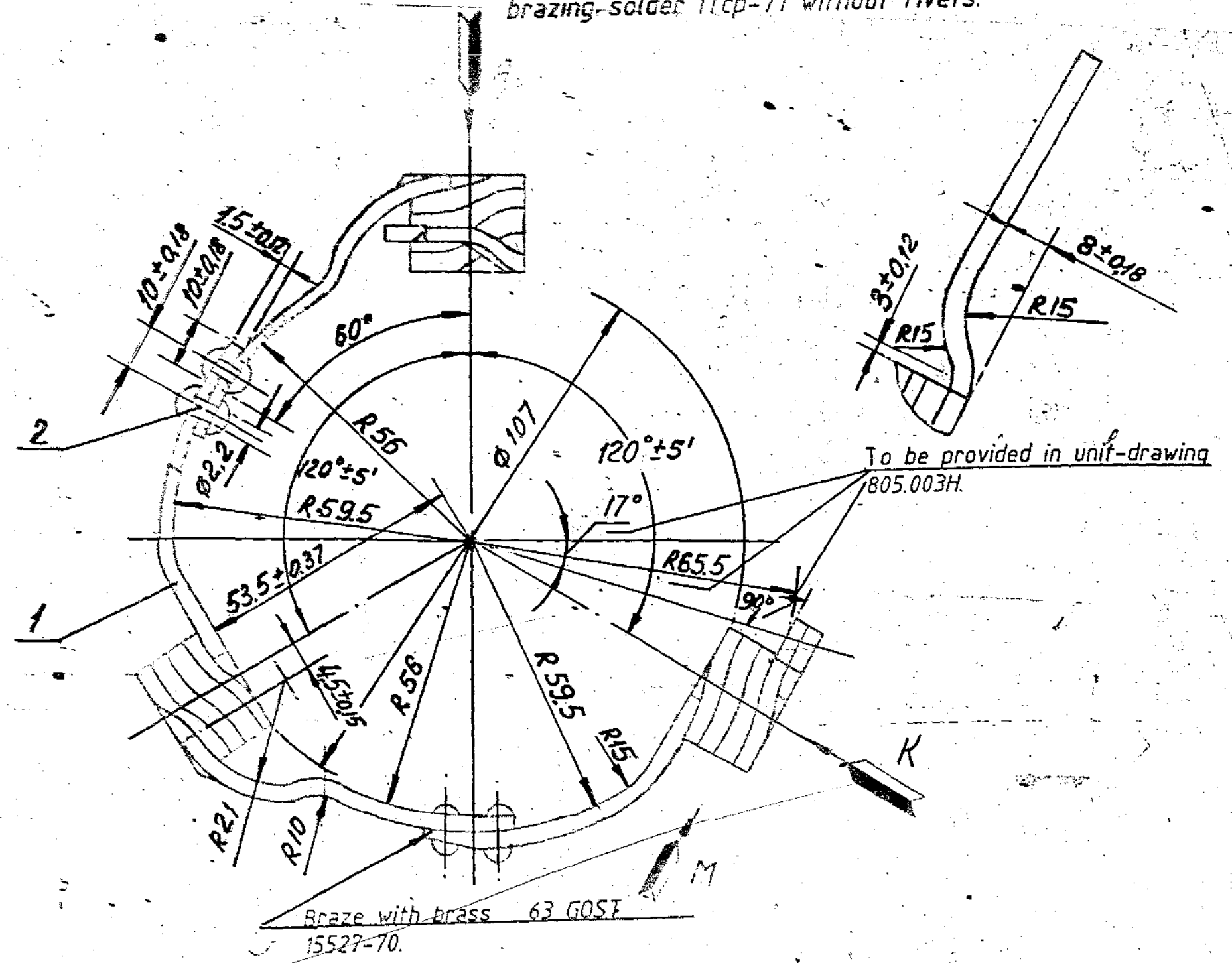
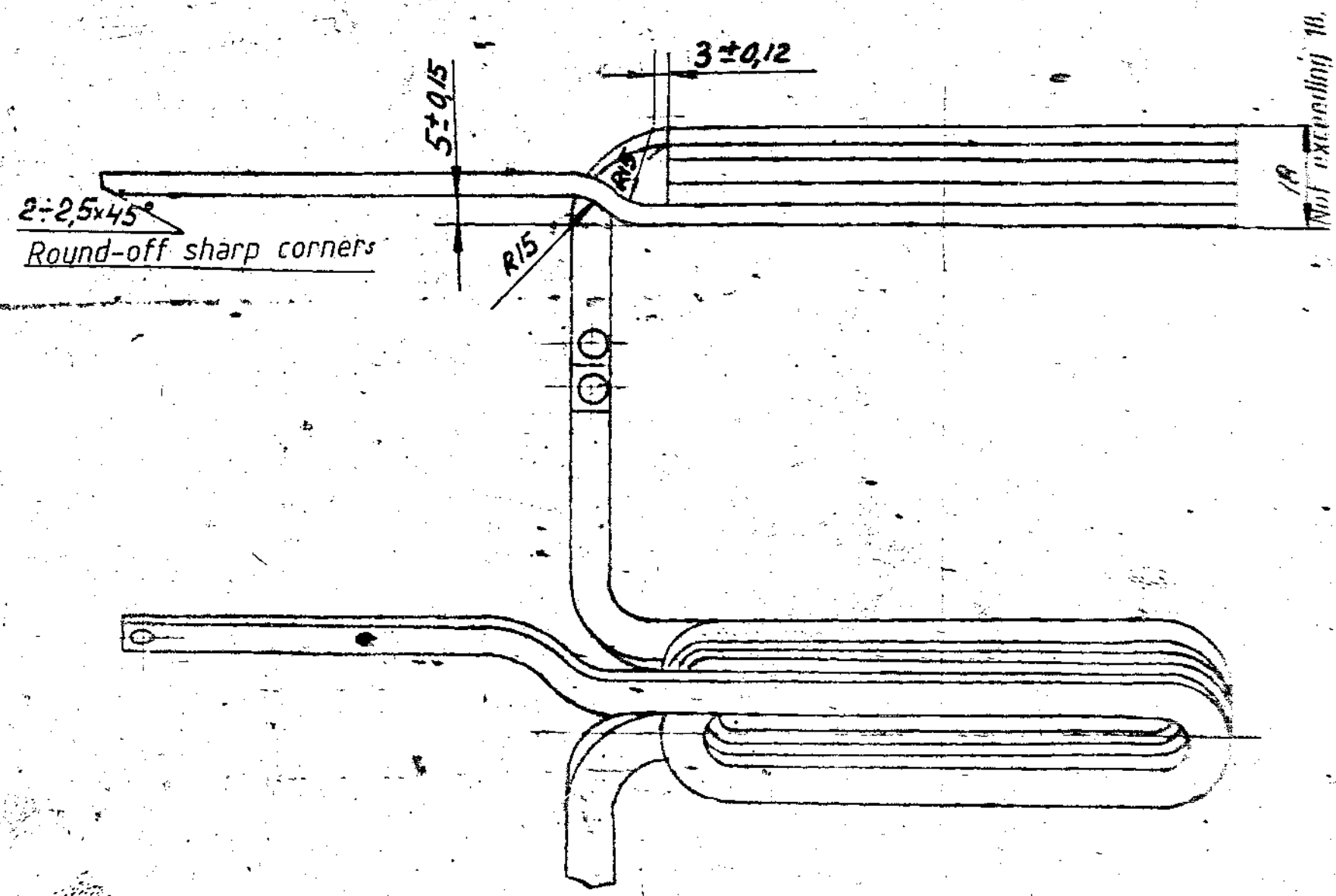
PROT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

EST. MASS	1.4 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS IN LETTERS
ISSUE DATE		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R UNSIZE EQUIVALENT CHAMFERS ARE PERMISSIBLE
ORAN	SCALE: 1:1	MATERIAL: USED ON: 100 256 H
CDR	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: INTERPOLE COILS
APPO	ALL THREADS TO CONFORM TO	D S. CAT NUMBER
DATE 9-5-87		DRAWING NUMBER 805-003 H

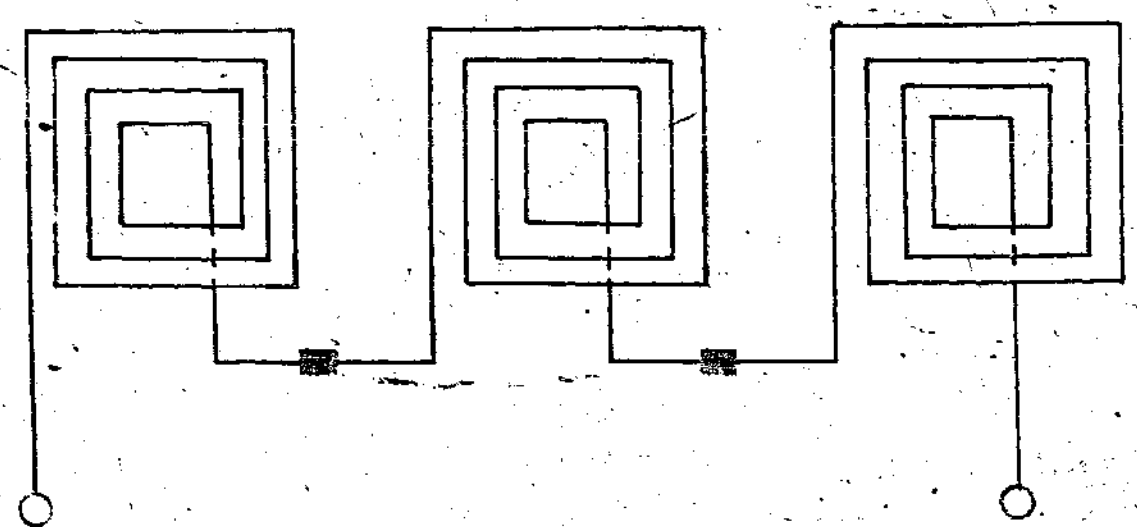
40

X141
25

1. Tolerances for free dimensions are to be as per accuracy class 7, OST 1010
2. Carry-out winding of all three coils with one continuous bus without connecting joints. (Coils may be made separately as per the drawing).
3. Bus joint may be brazed by resistance brazing using brazing-solder Пср-71 without rivets.

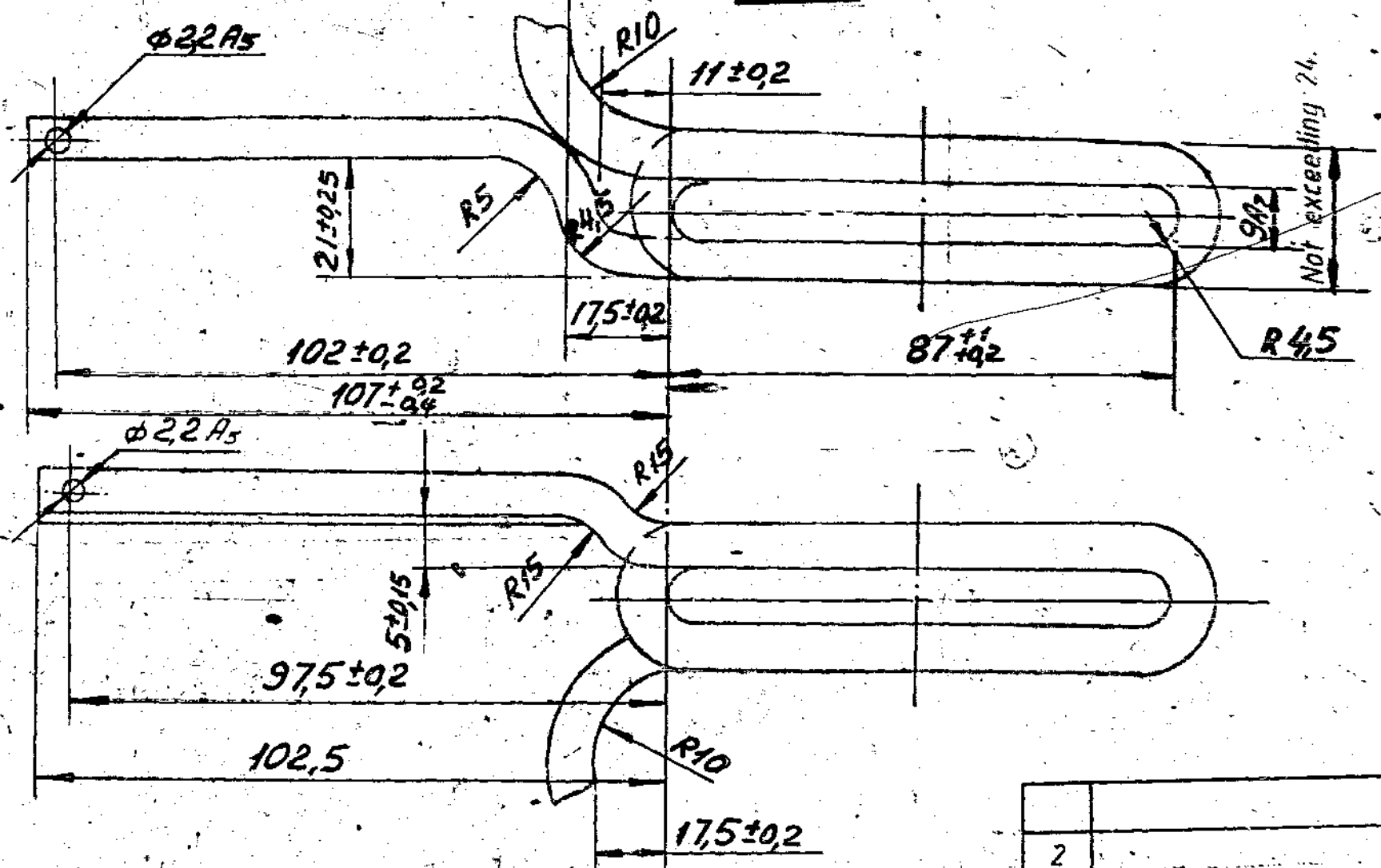


Connection diagram.



X/141
26
41

VIEW-A



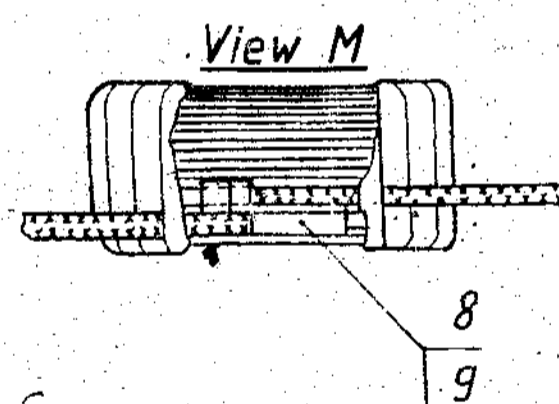
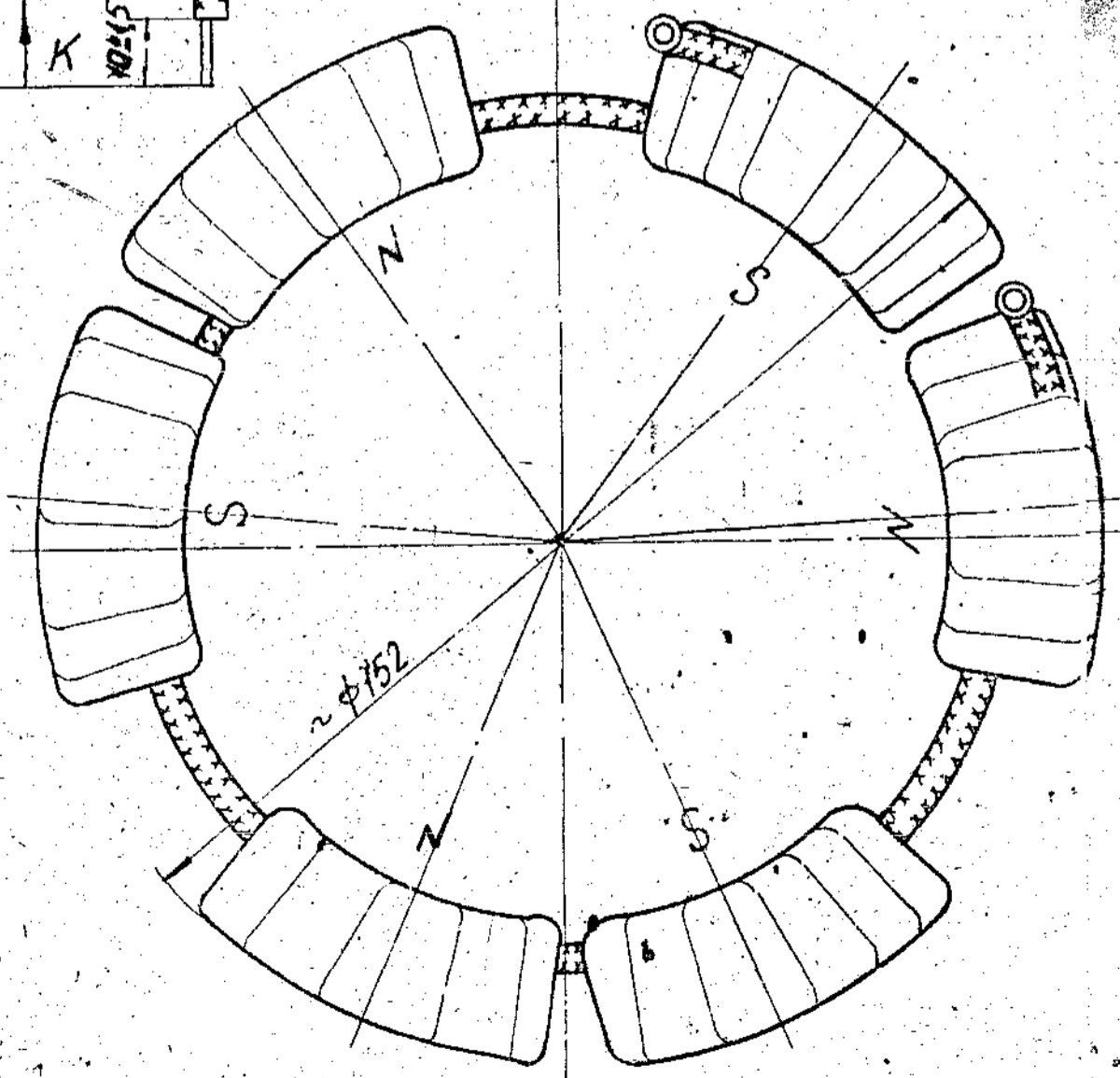
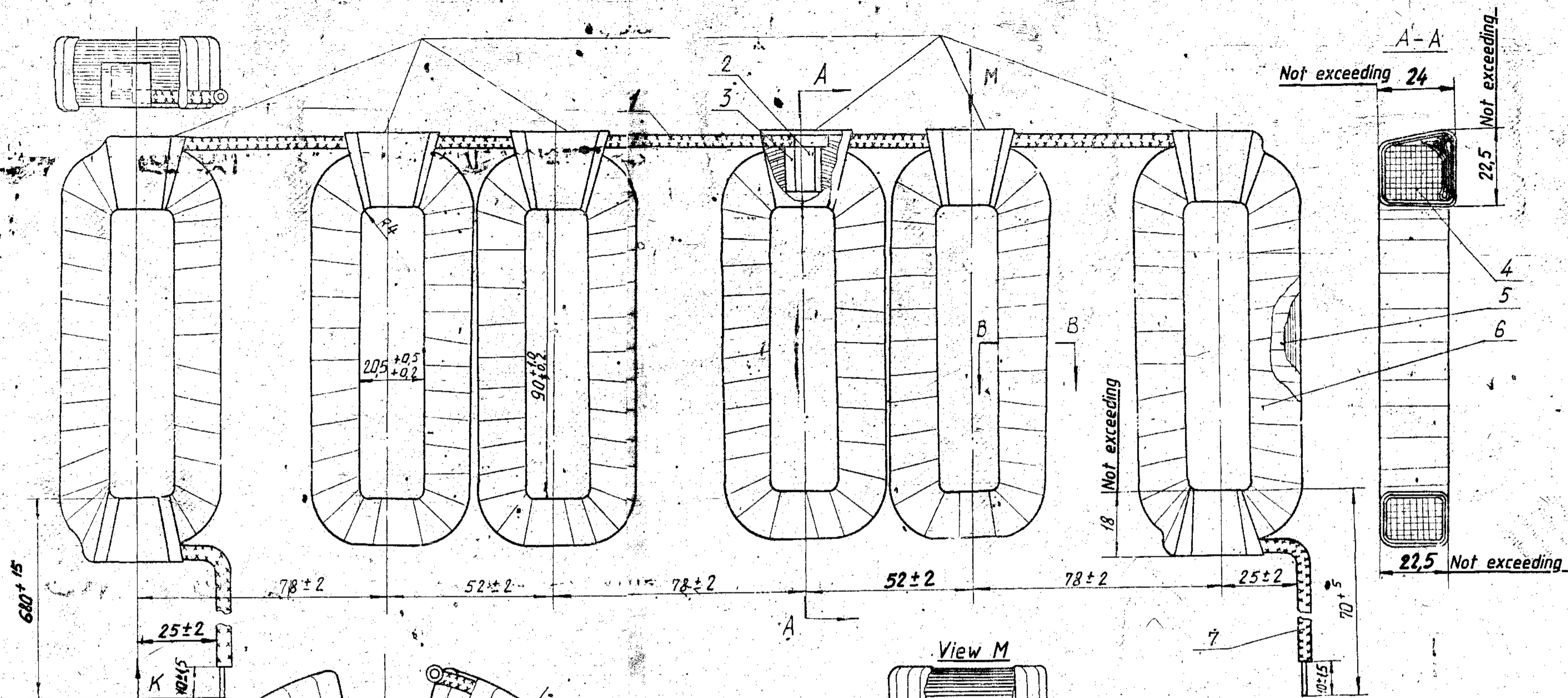
2		Brazing solder ncp-71	STANDARD
		GOST 19738-74.	4
1	805.0044-1	Rivet 3525A-2-8.	WITHOUT DRG
S.no.	Designation	Description	REMARKS

PLAT SAMPLE SHOULD BE APPROVED BY A.I.S.P. BEFORE BULK PRODUCTION

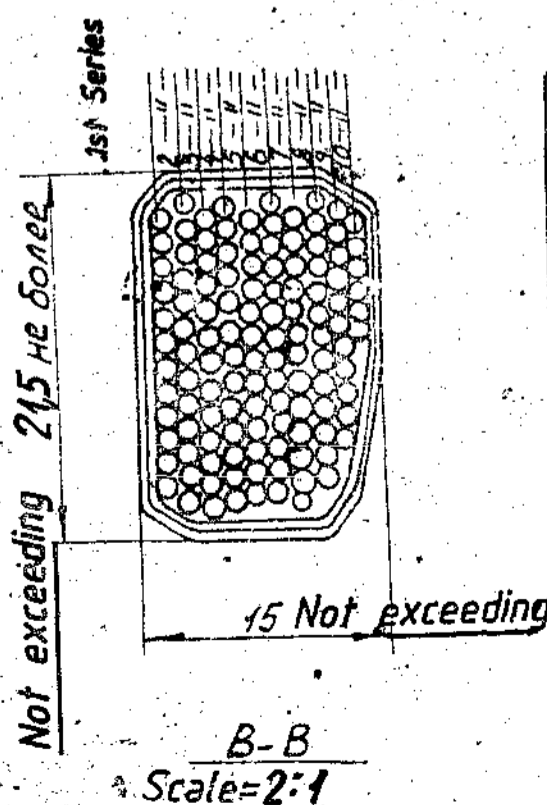
ISSUE DATE	NATURE OF AMENDMENTS	1ST. MASS	TO BE STAMPED ON MARKED WHERE INDICATED THIS →
URN	SCALE: 1:1	0,78 Kg	(LETTERS)
END.	DIMENSIONS REVISION		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED SURFACES TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHARACTERS ARE PERMISSIBLE
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED		MATERIAL: — USED ON: 805 003 H
APPD.	ALL THREADS CONFORM TO		CONT. TOLERANCE OF INSPECTION HEAVY VEHICLES (AVADI)
DATE 9-9-87			INTERPOLES COILS
			GOST NUMBER DRAWING NUMBER 805-004 H

VIEW K

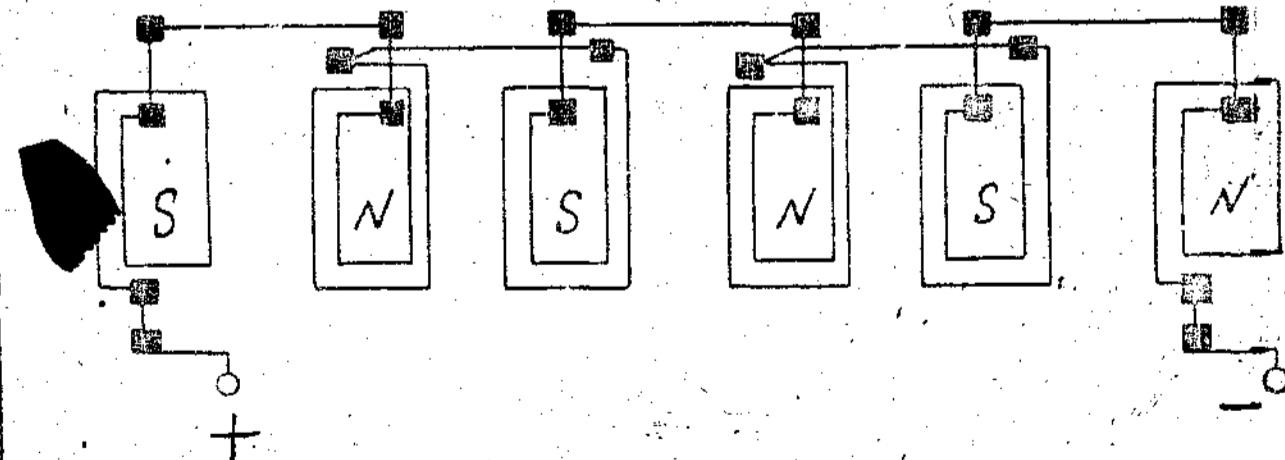
View of non-form wound coils
Sides of changes



Coil connection diagram
(Polarity of coils is shown from the side of pole boring)



SERIES	No. of Turns
1	12
2	13
3	13
4	13
5	13
6	13
7	13
8	13
9	11
10	6
Total = 120	



1. Insulate coils in onelayer half over lapping with ref. no. 5 and then in one layer half over lapping with ref. no. 6.
2. Solder the joints with tin 02.
3. Coils should be form wound as per external radius R 76 in its developed form.
4. Alternate material is 805.00H-5, copper M3M.
5. Place film, ref. no. 10 between the first, second and third series of turns.
6. Coat tape, ref. no 2.0,3 microns thick.

S.NO.	DESIGNATION	DESCRIPTION	QTY.	REMARKS
		Tin 02 GOST 860-75.		
10	805.005 H-10	Film ПЭТФ 0,01-0,02 ТУ 6-05-1597-72.	6	Without drawing
9	805.005 H-9	Electric grade cardboard ЭВ П 02 GOST 2824-75.	4	Without drawing
8	805.005 H-8	Varnished fabric А.В.М.С-105-0,06 GOST 2214-78.	12	Without drawing
7	805.005H-3	Wire МГЛW A 0 П 1,5 mm ² GOST 10349-75.	2	Without drawing
6	805.005 H-2	Cambric cotton tape Б-20-61 GOST 4514-78	16	—
5	805.005 H-2	Varnished fabric А.В.М.С-105-0,06 GOST 2214-78.	6	Without drawing
4	805.005 H-1	Wire ПЭВ - 2-14 GOST 7262-78.		Without drawing
3	805.005 H-4	Electric grade card-board "ЭВН" 0,2 GOST 2824-75.	8	—
2	805.005 H-5	Copper ММ 0,2 X 8 GOST 1173-77.	8	Without drawing
1	805.005 H-6	Wire МГЛW A 0 П 1,5mm GOST 10349-75.	5	Without drawing

PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST. MASS 3 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS LETTERS
ISSUE DATE	NATURE OF AMENDMENTS
DRN	SCALE: 1:1
CHD	DIMENSIONS IN mm
TEO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
APPO	ALL THREADS COILFORM TO
DATE 9-9-87	

CONTROL RATE OF INSPECTION HEAVY VEHICLES (AVADI)
EXCITATION WINDING COILS
DRAWING NUMBER 805-005 H

- 7. Electric-grade card-board 3BT 0.1 GOST 2824-75 may be placed instead of electric-grade card-board 3BT 0.1 GOST 2824-75, ref.nos. 3,4.
- 8. Dimension is given for reference.

9. Dimension given in brackets should comply with the dimension of section placed in armature slot and is given for fixture.

- 1. Orientation: Centre of commutator insulation should be at the centre of slot.
- 2. Insulation of slot ref. no.4 should be cut in the longitudinal direction of fibres and for ref no.3 in the transversal direction of fibres.
- 3. Apply varnish on insulation of slot, ref.nos 3 and 4 on two sides as per instruction TU3-21.
- 4. Insulate every other heads of section on fan side with glass varnished fabric 155 ref.no.6, and insulate the other heads of section upto the entrance into slot with film $\phi = 4$, ref.No.7.
- 5. Strip the insulation upto the dimensions 10.
- 5. Electric-grade card-board Ref.no.5 of thickness 0.3mm may be replaced by electric-grade card-board ref.No.5 of thickness 0.5mm.

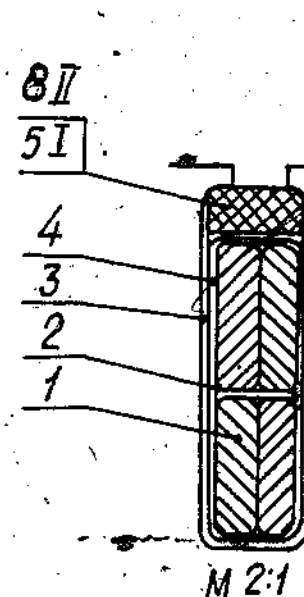
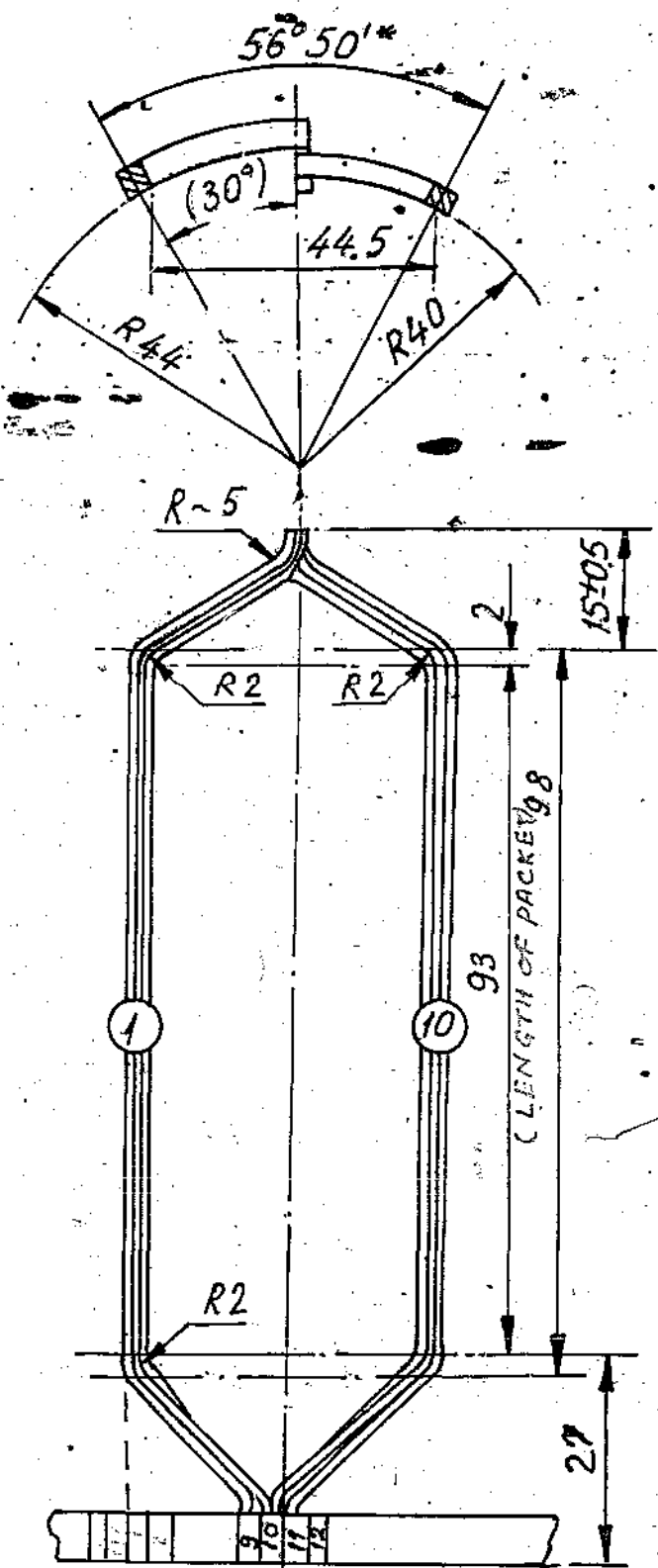
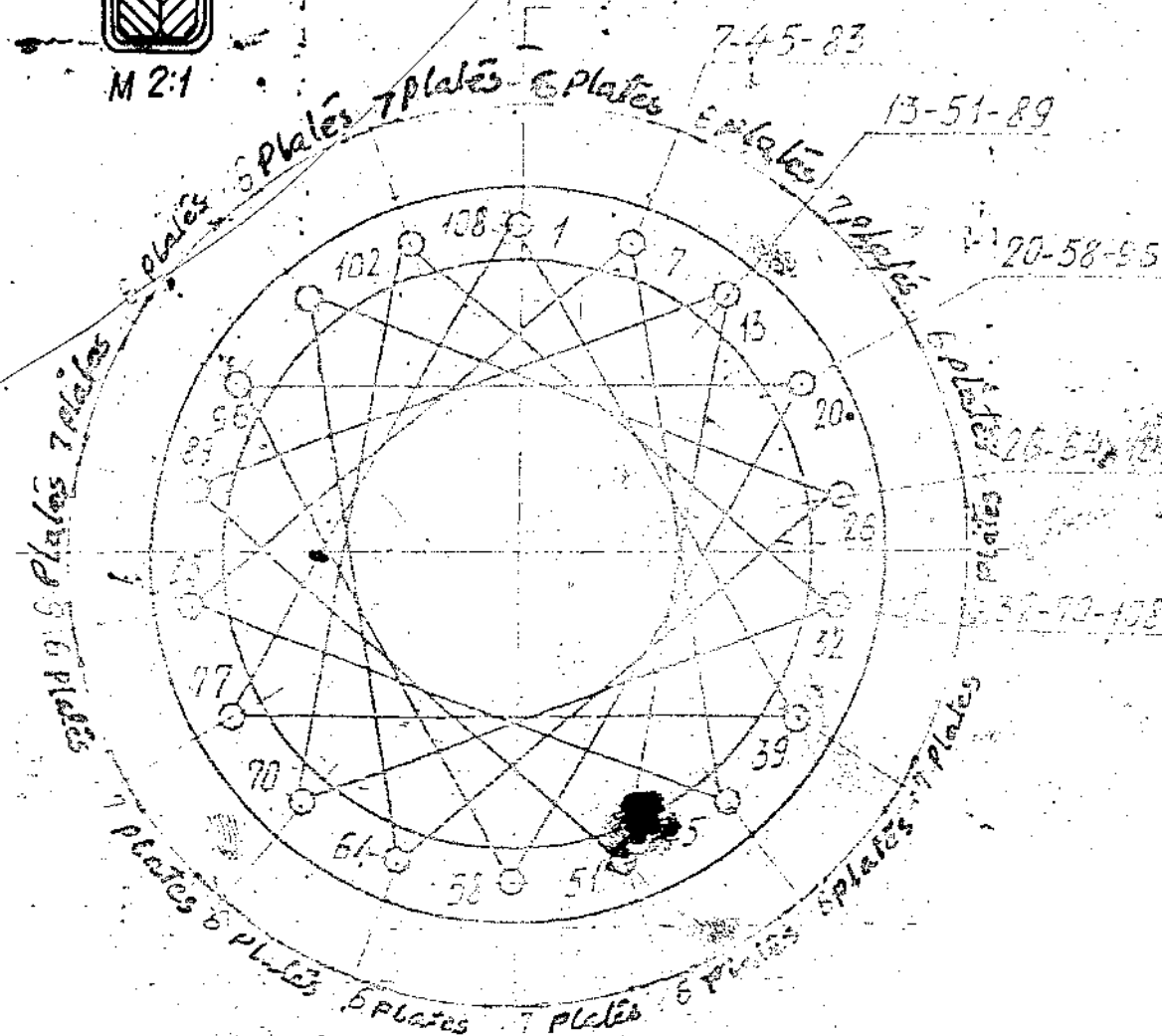


DIAGRAM SHOWING EQUIPOTENTIAL CONNECTIONS TO COMMUTATOR



VIEW FROM THE COMMUTATOR END

S.No	Designation	Description	Qty	Remarks
8		Electric-grade card-board 3BT 0.5 GOST 2824-75		alternate
7	810.079H-7	Film $\phi = 4$ grade-1 0.040x10		Without drawing
6	810.079H-6	Glass varnished fabric 155-155x10 GOST 10156-78		Without drawing
5	810.079H-3	Electric-grade card-board 3BT 0.1 GOST 2824-75		alternate
4	810.079H-4	Electric-grade card-board 3BT 0.1 GOST 2824-75		Without drawing
3	810.079H-5	Electric-grade card-board 3BT 0.1 GOST 2824-75		Without drawing
2	810.079H-2	Glass micener 22 GOST 8727-78		Without drawing
1	810.079H-1	Wire mark COT-10.80X3.5 TY 16-705.074-70		Without drawing

PILOT SAMPLE SHOULD BE APPROVED BY A.I.S.P BEFORE BULK PRODUCTION

43

ISSUE	DATE	NATURE OF AMENDMENTS	EST. MASS 0.02 Kg	TO BE STAMPED ON INDICATED THUS ϕ (LETTERS)
DRN		SCALE: 1:1		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE A RIGID EQUIVALENT CHAMFERS ARE PERMISSIBLE
CHD		DIMENSIONS IN mm		MATERIAL: - USED ON: 500-155 H
TED		TOLERANCE ON DIMS UNLESS OTHERWISE STATED		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD		ALL THREADS TO CONFORM TO		TITLE: SECTION
DATE: 9-87				D'S CAT NUMBER: DRAWING NUMBER: 810 079 H

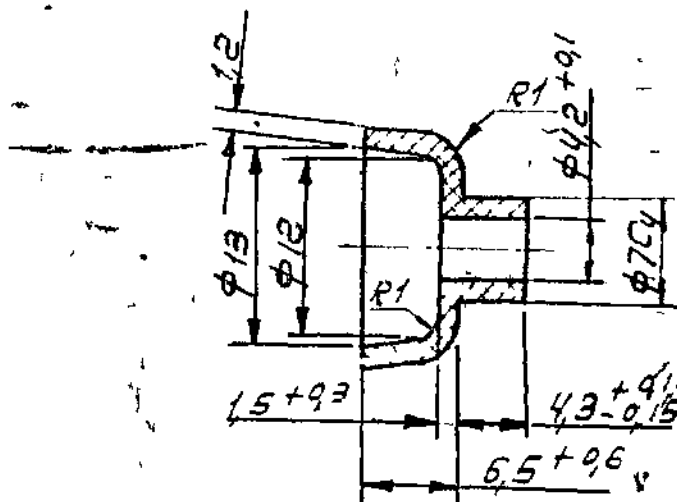
886 188 H 887 988
 107

Provide dimensions with out tolerances as per accuracy class 7, OST 1010

(Rectification is not permitted)

Alternate material is glass fabric TB97-2

TY 16-503.059 75



100-256-H

D-83

PRESS MATERIAL AT-6 GOST 20437-75

117

PROT SAMPLE SHOULD BE APPROVED BY A.H.P BEFORE BULK PRODUCTION

			EST. MASS 0,001 Kg	TO BE STAMPED OR INDICATED (THIS #) 1
			LETTERS)	
			ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE R IN THE EQUIVALENT CHAIN RS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL:- * SEE ABOVE	USED ON:- 100 256 H
DRG		SCALE:- 2:1	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
LIB		DIMENSIONS IN mm	TITLE: INSULATION BUSH	
TCO		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D'S CAT NUMBER	
APPD		ALL THREADS TO CONFORM TO	DRAWING NUMBER 886-188 H	
DATE	9-9-87			

889 012 H

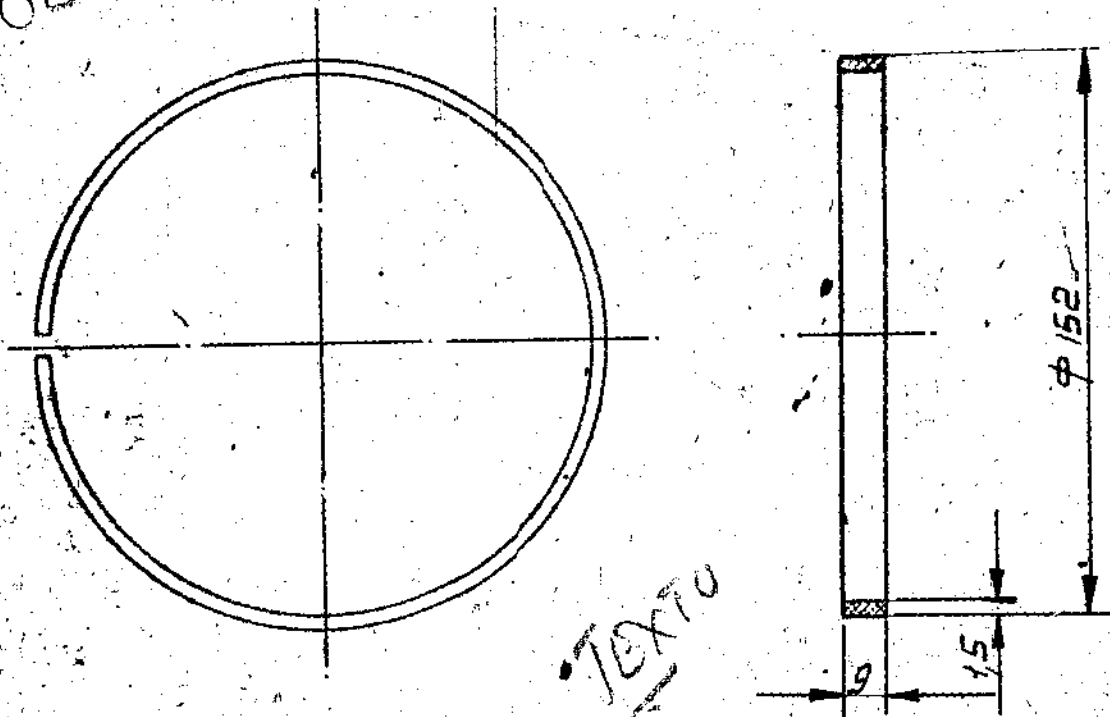
Tolerances for free dimensions are as per accuracy Class 7, OST 1010.

Total length is 471 mm, bend it into ring as per $\phi 152$: 'insitu' in body.

Apply varnish coating and dry as per H8 AO. 028. 007.

X1141
108

250-78



TEXTOLITE

* TEXTOLITE OF GRADE "A" H
GOST 2910-74

0-83

118

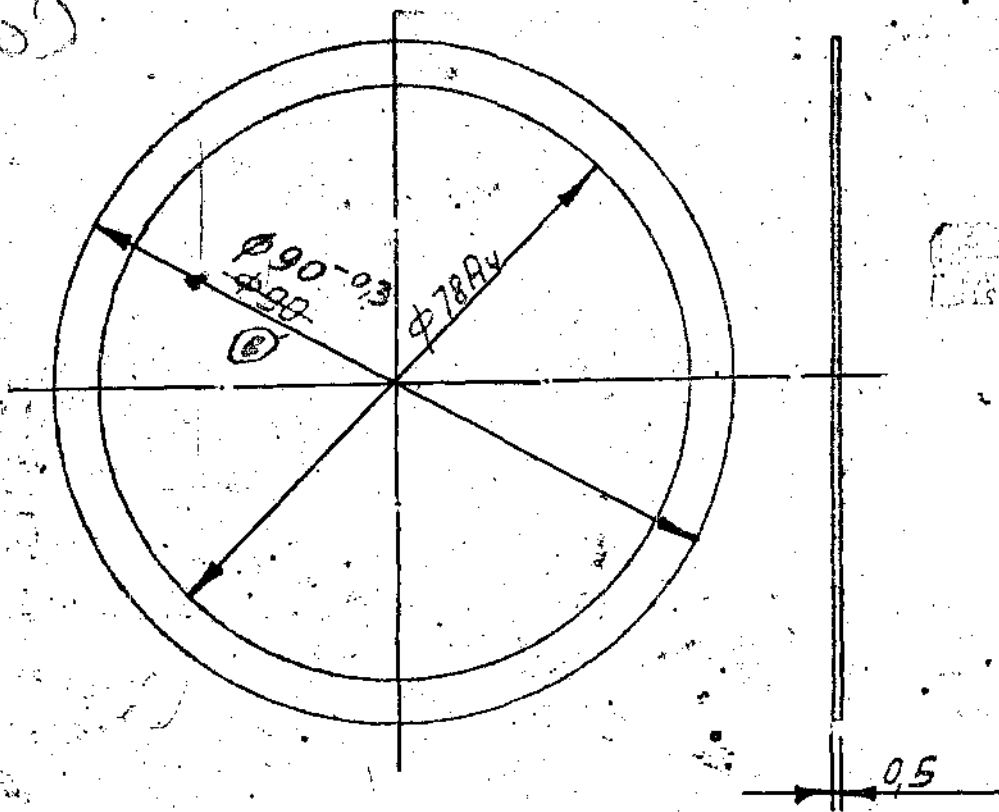
PROT SAIZIB SHOULD BE APPROVED BY A HSP BEFORE OUR EXECUTION

			EST. MASS : 0,011 Kg	TO BE STAMPED OR MARKED WHERE INDICATED (THIS # LETTERS)
				ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED FACED CORNERS TO HAVE R OUTSIDE R IN THE EQUIVALENT PLACES ARE PERMISSIBLE
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL : * SEE ABOVE	USED ON : 100 256 H
DRN		SCALE: 1:2	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD!	
CHKD		DIMENSIONS IN mm	INSULATION RING	
TCO		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D'S CAT NUMBER	
APPO		ALL THREADS CONFORM TO	889 012 H	

H 857-168

Alternate material is glass textolite CT-II
Gost 12652-74.

XIII
109



AMDI. NOTN. No: 250-78

*Amidt modifikas
Bolder lines*

D-83

* GLASS TEXTOLITE OF GRADE CT-1
GOST 12652-74

PILOT SAMPLE SHOULD BE APPROVED BY AHS P. BEFORE-BULK PRODUCTION

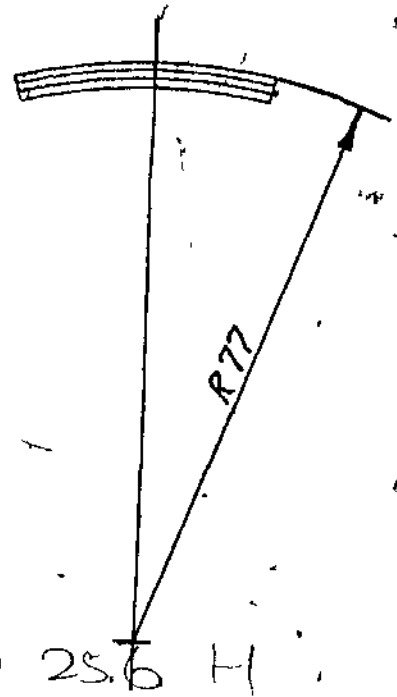
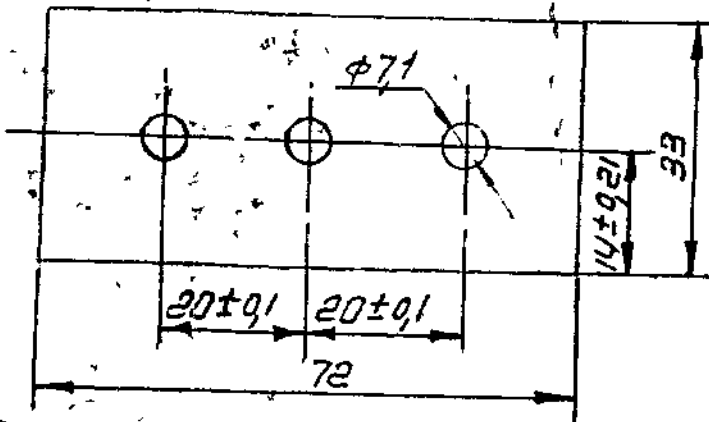
		EST. MASS 0.0011 Kg	(TO BE STAMPED OR MARKED WHERE DEDICATED THUS IN LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL * SEE ABOVE	USED ON: 750 171 H
DRM	SCALE: 1:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE: INSULATION WASHER	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER	DRAWING NUMBER 891 458 H
ARP	ALL THREADS CONFORM TO		
DATE 9-9-87			

1. Tolerances for free dimensions are as per accuracy class 7, OST 1010.
2. Make of three layers of micanite of thickness 0,5 mm.
3. Coat edges of gasket with Гр 3П -076 Yellow, III - H8H0 050. 001-3.
4. Two-layer packing of micanite of thickness 0,8 mm is allowed,

86-00



Touch Bell



D-83

X 144

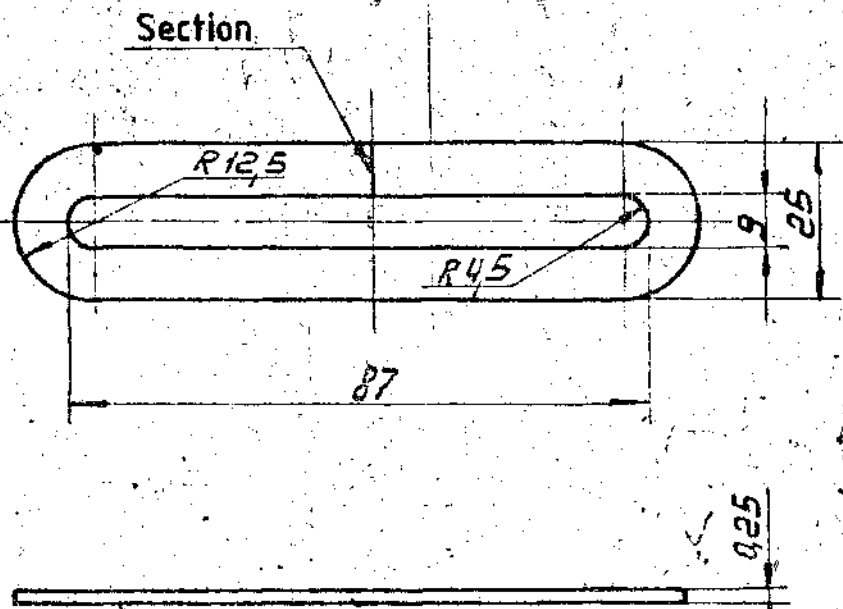
120

PILOT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

		EST. MASS 0-011 Kg	TO BE STAMPED OR INDICATED THIS # [] (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNER TO HAVE R OUTSIDE OR INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL - MICANITE K φ / GOST 2196 -75	USED ON - 100 256 H
DRN	SCALE - 1:1	CONTROL POINT OF INSPECTION (HEAVY VEHICLES' AVADI)	
CHD	DIMENSIONS IN mm	TITLE: INSULATION GASKET	
TEC	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	S CA NUMBER	
APPD	ALL THREADS TO CONFORM TO	DRAWING NUMBER 893 017 H	
DATE 9-9-87			

H542 E68

2



AMDT, NOTN, No: 0024-79 0024-79

Tolerances for free dimensions are as per accuracy class 7, GOST 1070.

X 121
111

805-003 + A

0-83

GLASS MICANITE 78
GOST 8727-F4C-TT-30-0,25

121

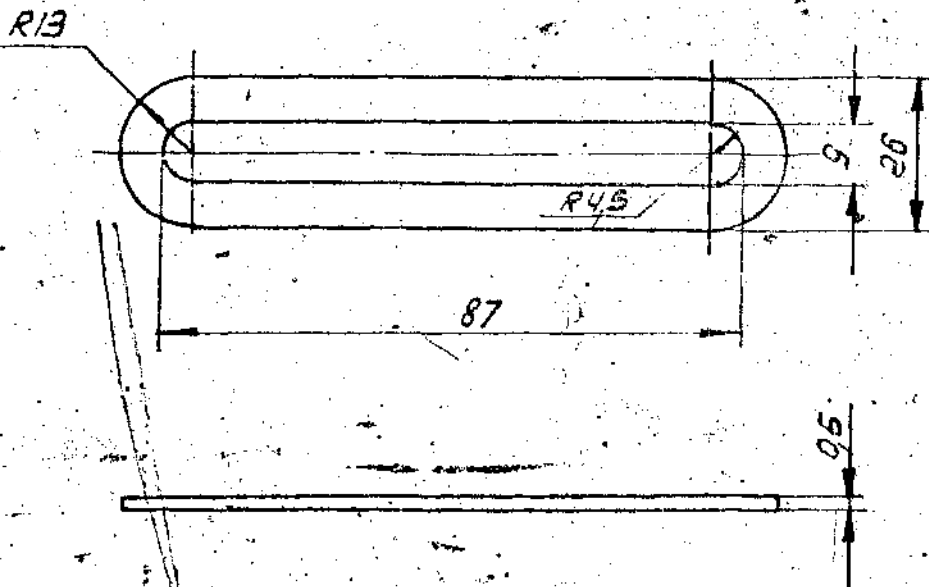
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

		EST. MASS 0,0005 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL * SEE ABOVE	QTY ON 805-003 H
DRN	SCALE: 1:1	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CDR	DIMENSIONS IN mm	TITLE: INSULATION GASKET	
ICD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER	
APPO	ALL THREADS CONFORM TO	DRAWING NUMBER 893-249 H	
DATE 9-9-87			

893 250 H

Tolerances for free dimensions are as per accuracy class 7, OST 1010.

(*) (e) |



AMDJ. NOTN. No: 250-76

D-83

805-003 H

X147
115

* GLASS TEXOTOLITE CT-1
GOST 12652-74

122

PROT SAMPLE SHOULD BE APPROVED BY A HSP BEFORE BULK PRODUCTION

		EST. MASS 0,001 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS (P- LETTERS)
			ALL CHAMP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R OUTSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
ISSUE DATE	NATURE OF AMENDMENTS	MATERIALS * SEE ABOVE	USED ON: - 805-003 H
DRN	SCALE: - 1:1		
CHD ^{SP} [Signature]	DIMENSIONS IN mm	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCO [Signature]	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	⊕ ⊖ TITLE:	INSULATION GASKET
APPD [Signature]	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER 893-250-H
DATE 9-9-87			

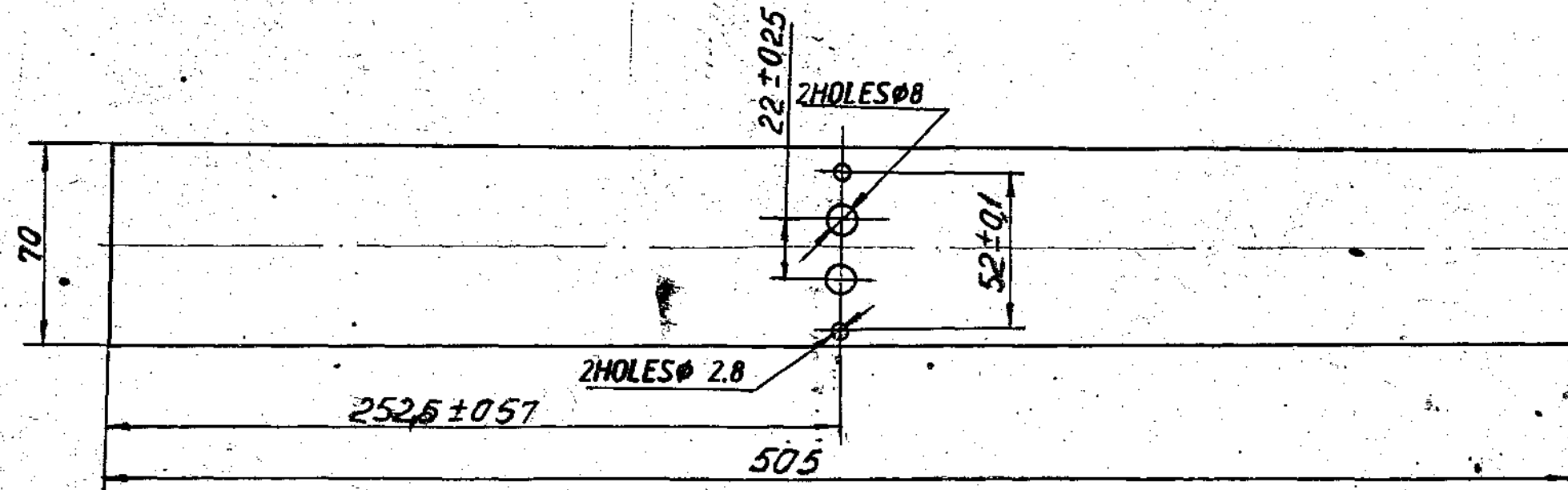
893.252H

Результ. №
Утвердил

2

1. Tolerances for free dimensions are as per accuracy class 7, ost 1010.

2. Alternate material is glass textolite CT-II GOST 12652 -74.



* GLASS TEXTOLITE OF GRADE CT-1
GOST -12652-74

123

PILOT SAMPLE SHOULD BE APPROVED BY A.I.S.P. BEFORE BULK PRODUCTION

EST. MASS	0.025 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS & LETTERS
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
DRILL	SCALE: 1:2	MATERIAL * SEE ABOVE
CHKD	DIMENSIONS IN mm	USED ON: 27Q-034.H
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLER OF INSPECTION (MAY VEHICLES) AVADI
APPD	ALL THREADS CONFORM TO	INSULATION GASKET
DATE 9-9-87		D'S CAT NUMBER
		DRAWING NUMBER 893.252 H

D83

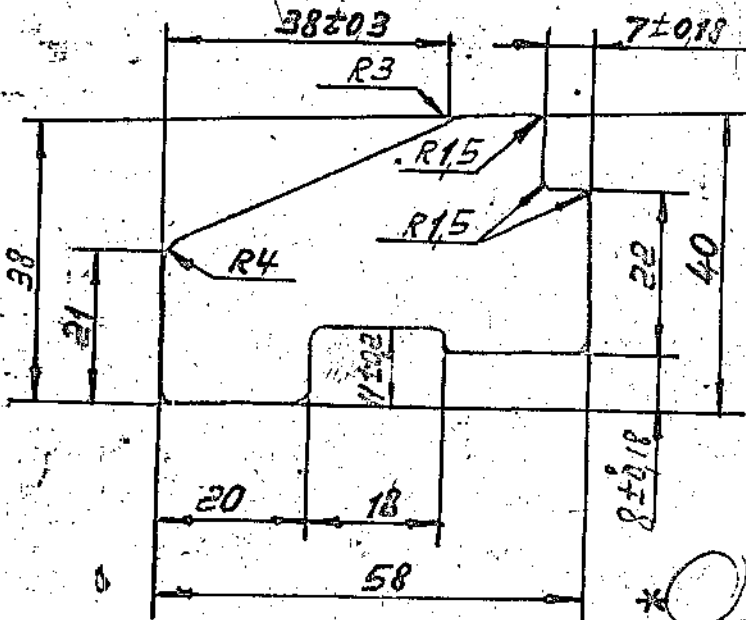
893.253H

NOT. No. 25d-78

Tolerances for free dimensions are as per accuracy Class 7, OST 1010.

Alternate material is glass textolite of grade CT-1 GOST 12652-74.

Apply varnish coating HBA 0028.007.



ELECTRO TECHNICAL TEXTOLITE
"A" GOST 2910 -74

with no

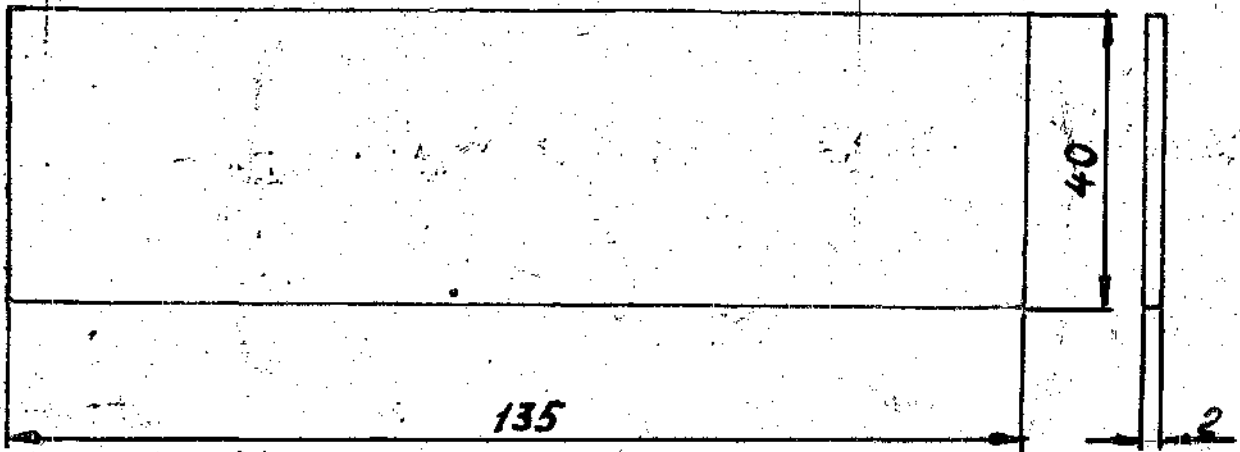
124

PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

		EST. MASS 0.003 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS Ⓢ (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- 002 145 H
DRN	SCALE:- 1:1	SEE ABOVE *	
CRD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TEC	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: INSULATION, GASKET	
APPD	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE 9-9-07	TO		893.253 H

H E7E-E68

Tolerances for free dimensions are as per accuracy class 7, OST 1010.



* RUBBER GRADE H068-1
TY 380051166-73

X 100

D-83

CR25

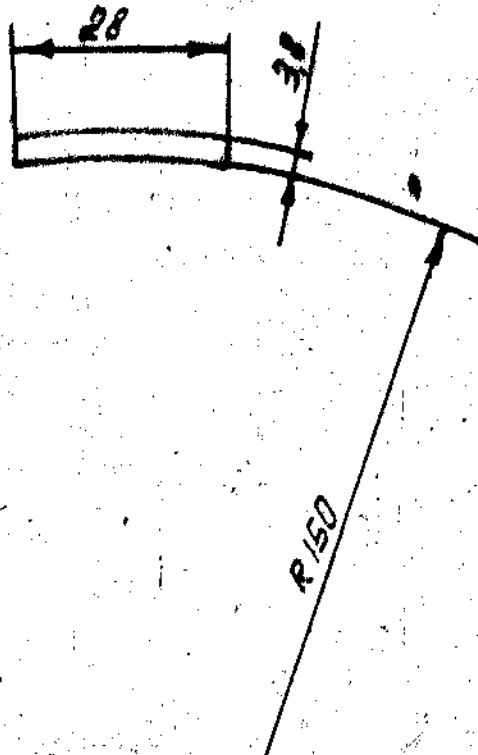
(A) ALT MATL.: RUBBER GRADE BNC TO SPECN. CQA(HV)/NBR

PROT SAMPLE SHOULD BE APPROVED BY AHS P BEFORE BULK PRODUCTION

		EST. MASS	TO BE STAMPED ON MARKED WHERE INDICATED THUS (LETTERS)
		0.0216 Kg	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R UNLESS EQUIVALENT CHAMFERS ARE PERMISSIBLE	
A	26.05.08	Lt. No. TC/GEN/IND-III Dt. 02.04.08	
SS JE	DATE	NATURE OF AMENDMENTS	
DRN	B	SCALE: 1:1	MATERIAL * SEE ABOVE USED ON: 002.145 H
CRD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI
TCO	D	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: GASKET
APPO		ALL THREADS CONFORM TO	D S CAT NUMBER
DATE	9-9-87		DRAWING NUMBER 893.343 H

H9hL E68

1. Tolerances for free dimensions are as per accuracy Class 7, OST 1010.
2. Alternate material is Mica C/M-1 TY 21-25-2574.



Border Line

Thickness 0.15 mm.

D-83

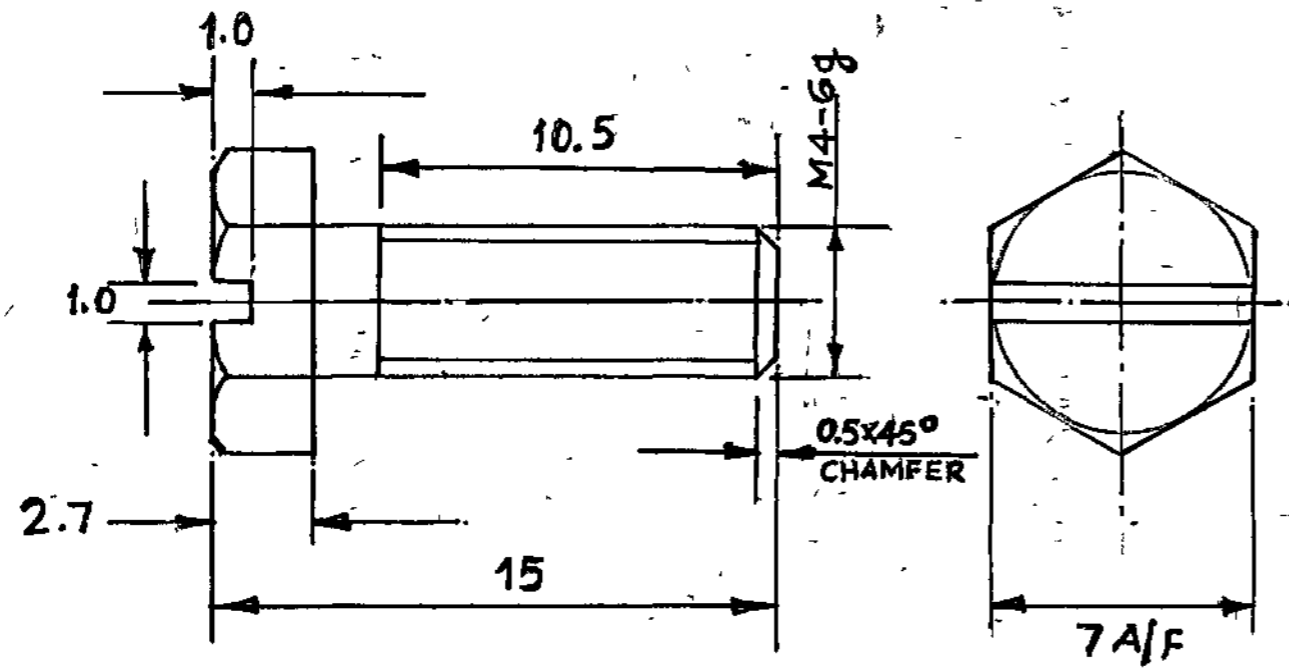
X141

PROT. SAMPLE SHOULD BE APPROVED BY AHEP BEFORE COMM. PRODUCTION

126

EST. MASS 0-00005 Kg	TO BE STAMPED ON LOCATED THUS	LETTERS)
ALL SHARP EDGES AND CORNERS TO BE BELOVED UNLESS OTHERWISE STATED HADDED CORNER TO HAVE R OUTSIDE R VALUE EQUIVALENT TO CHAMFER AND PERMISSIBLE		
ISSUE DATE	NATURE OF APPROVEMENTS	MATERIAL - MICA C/M-1 TY 21-25-2574
DRW <i>[Signature]</i>	SCALE - 1:1	USED ON - 500 155 H
CHK <i>[Signature]</i>	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
TCD <i>[Signature]</i>	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: GASKET
APPD <i>[Signature]</i>	ALL THREADS TO	DRAWING NUMBER 893766 H

DRAWING NUMBER
3240A-4-12KA



EXPLANATORY NOTE:-

MATERIAL QUOTED:- STEEL 40 GOST 1050-74

40 = GRADE OF STEEL

CHEMICAL COMPOSITION:-

CARBON	= 0.37-0.45
SILICON	= 0.17-0.37
MANGANESE	= 0.50-0.80
CHROMIUM	= 0.25
PHOSPHORUS	= 0.035
SULPHUR	= 0.040
COPPER	= 0.025
NICKEL	= 0.25

} MAX

MECHANICAL PROPERTIES.

ULTIMATE TENSILE STRENGTH	kgf/mm ² = 58 (min)
YIELD POINT	kgf/mm ² = 34 (min)
ELONGATION %	= 19 (min)
REDUCTION IN AREA %	= 45 (min)
IMPACT STRENGTH	kgf/cm ² = 6 (min)

1. COATING: ZINC PLATING, 6 MICRONS THICK, CHROMATISATION.

EXPLANATORY NOTE ADDED ON 27-3-92

132

PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

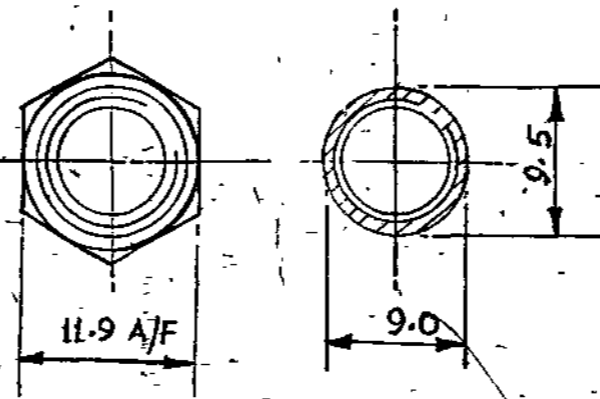
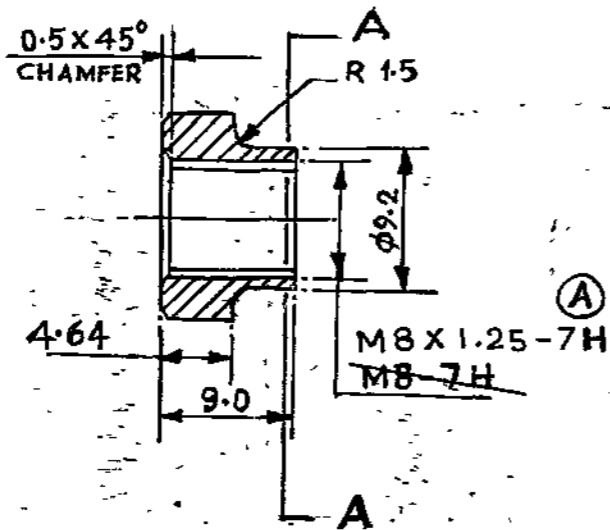
EST. WT. TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SIDE INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	<i>Prudis</i>	MATERIAL:- STEEL 40	USED ON SPTA ITEM
CHK	<i>Prudis</i>	GOST 1050-74	100 - 256 H
TCO	<i>Prudis</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
APPD	<i>Prudis</i>	AVADI	
DATE	17-12-90	TITLE	
SCALE:-	5:1	SCREW	
DIMENSIONS IN mm		D S CAT NUMBER	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69		DRAWING NUMBER	
ALL THREADS TO CONFORM TO		3240A-4-12 KA	
ISSUE DATE	NATURE OF AMENDMENTS		

SIZE - A3

DRAWING NUMBER
3373A-8KA



SECTION A-A

EXPLANATORY NOTE:-

MATERIAL QUOTED: HIGH QUALITY STEEL
38XA GOST 4543-71.

CHEMICAL COMPOSITION %

CARBON	= 0.35 - 0.42	} MAXIMUM
SILICON	= 0.17 - 0.37	
MANGANESE	= 0.50 - 0.80	
CHROMIUM	= 0.80 - 1.10	
PHOSPHORUS	= 0.025	
SULPHUR	= 0.025	
COPPER	= 0.30	
NICKEL	= 0.30	

MECHANICAL PROPERTIES:-

ULTIMATE STRENGTH	kgf/mm ² (min) = 95
YIELD POINT	kgf/mm ² (min) = 80
RELATIVE ELONGATION %	(min) = 12
RELATIVE REDUCTION ALONG	
CROSS SECTION %	(min) = 50
IMPACT STRENGTH	kgf/cm ² (min) = 9

COATING: CADMIUM PLATED, 9 MICRONS THICK, OILED.

G (133)

EXPLANATORY NOTE ADDED ON 2-4-92

PLOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

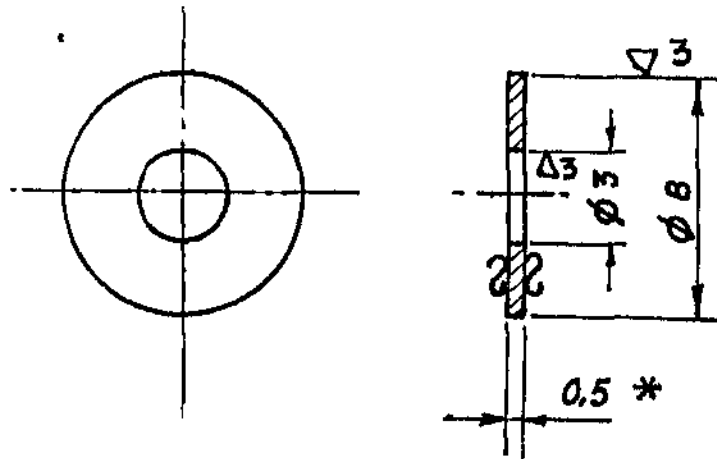
EST. WT. TO BE STAMPED OR MARKED WHERE INDICATED THIS # (LETTERS)

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	<i>[Signature]</i>	MATERIAL:- STEEL	USED ON SPTA ITEM
CHK	<i>[Signature]</i>	38XA-GOST4543-71	002-145 H
TEO	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
APPO	<i>[Signature]</i>	AVADI	
DATE	17-12-90	TITLE - SELF LOCKING NUT	
SCALE:-	2:1	D#S CAT NUMBER	
DIMENSIONS IN mm TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS:2102-69		DRAWING NUMBER	
A 18.4.02 AUTHY LT. No: 10023 / IND-III / 506 dt. 17-4-02		3373A-8KA	
ISSUE DATE	NATURE OF AMENDMENTS		

SIZE A3

DRAWING NUMBER
3402A-0.5-3-8Kd



NOTE:-

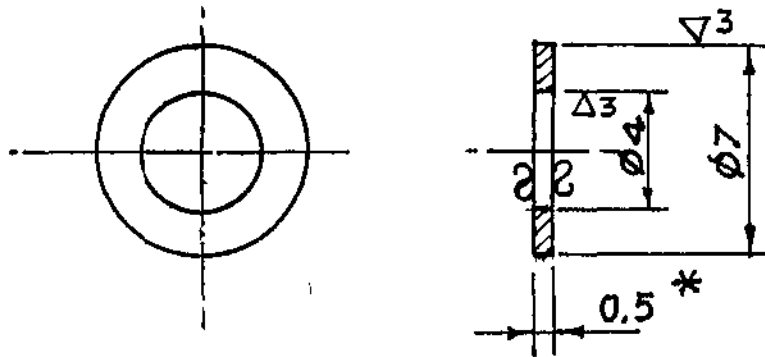
1. COATING : OXIDIZING .
2. * TOLERANCE ON THE DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL .

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		
		MATERIAL:- STEEL	USED ON.	
		GDE 10 TO GOST 1050-74	GENERATOR, UTD-20 002-145H	
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.		
DRN <i>Alkash</i>	SCALE:- 4:1			
CHD <i>Alkash</i>	DIMENSIONS IN mm -	TITLE WASHER		
TCD <i>Alkash</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69			
APPD <i>Alkash</i>	ALL THREADS CONFORM TO	D S CAT, NUMBER		DRAWING NUMBER
DATE				3402A-0.5-3-8Kd
26-11-88				
SIZE A4				

G
139

DRAWING NUMBER
3402A-0.5-4-7Kd



NOTE :-

1. COATING: OXIDIZING
2. *TOLERANCE ON THE DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL.

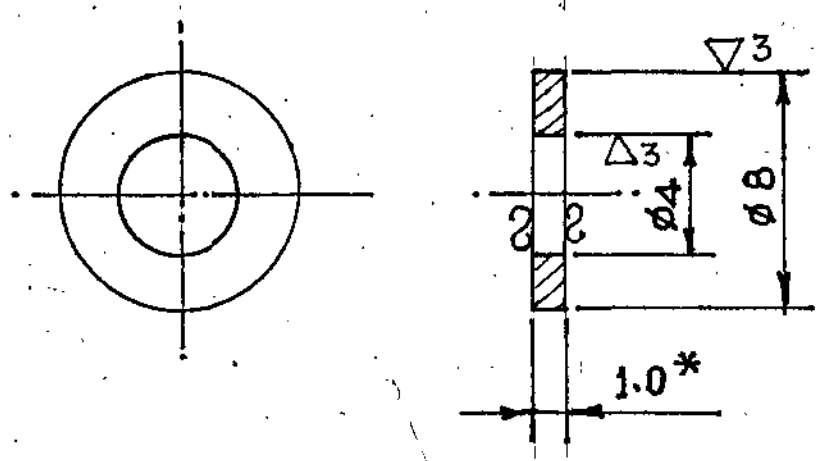
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

			EST. WT. —	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
			ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
			MATERIAL:- STEEL GDE 10 TO GOST 1050-74	USED ON GENERATOR, UTD-20 002-145 H
ISSUE	DATE	NATURE OF AMENDMENTS		
DRN	<i>[Signature]</i>	SCALE:- 4:1		
CHD	<i>[Signature]</i>	DIMENSIONS IN mm		
TCD	<i>[Signature]</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69		
APPD	<i>[Signature]</i>	ALL THREADS CONFORM TO		
DATE	26-11-98	D S CAT NUMBER		DRAWING NUMBER 3402A-0.5-4-7Kd

SIZE A4

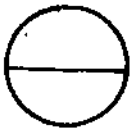
G
140

DRAWING NUMBER
3402A-1-4-8 Kd



NOTE:-

1. COATING : OXIDIZING.
- 2.* TOLERANCE ON THE DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL.

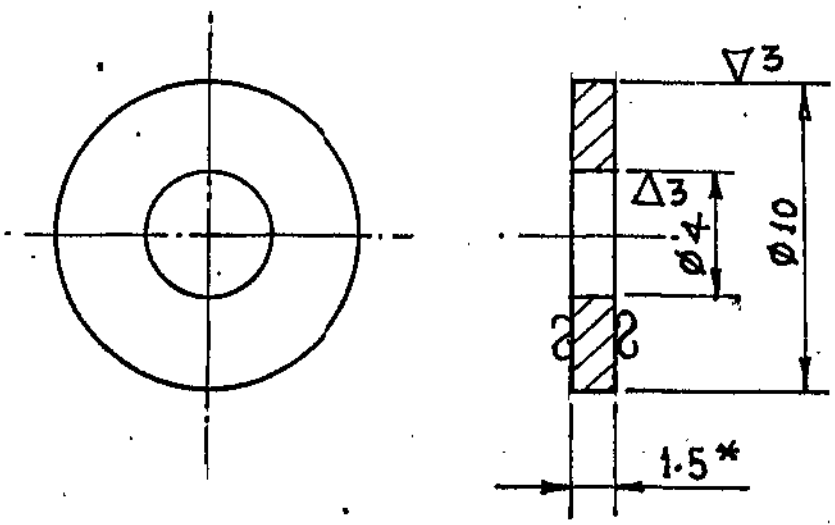


PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT.	TO BE STAMPED OR MARKED WHERE INDICATED THUS \neq (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
		MATERIAL:- STEEL GDE 10 TO GOST 1050-74	USED ON GENERATOR UTD-20 002-145H
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.	
DRN <i>Jalbock</i>	SCALE:- 4:1	TITLE WASHER	
CHD <i>Jalbock</i>	DIMENSIONS IN mm		
TCD <i>Jalbock</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69	D S CAT NUMBER	DRAWING NUMBER 3402A-1-4-8Kd
APPD <i>C.J.</i>	ALL THREADS CONFORM TO		
DATE 26-11-98			

SIZE A4

DRAWING NUMBER
3402A-1.5-4-10Kd



NOTE:-

1. COATING: OXIDIZING.
- 2 * TOLERANCE ON THE DIMENSION IS EQUAL TO THE TOLERANCE ON THE THICKNESS OF DELIVERED MATERIAL.

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
		MATERIAL:- STEEL GDE 10 TO GOST 1050-74	USED ON GENERATOR. UTD-20 002-145H
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADK.	
DRN	SCALE:- 4:1	TITLE WASHER	
CHD	DIMENSIONS IN mm		
TCD	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69	D S CAT NUMBER	
APPD	ALL THREADS CONFORM TO		
DATE		DRAWING NUMBER 3402A-1.5-4-10Kd	

SIZE A4